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**AIRPOWER AND THE EMERGING U.S. SECURITY
FRAMEWORK FOR THE PERSIAN GULF**

by

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June 2005

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PERSIAN GULF**

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ABSTRACT

The role of airpower in the Persian Gulf security framework is approaching an important crossroads as old missions end, strategic assumptions change, and uncertain requirements emerge. Future requirements will be defined in a strategic environment where regional threats, relevant actors, and U.S. interests have all evolved. For over a decade, airpower has contributed important capabilities to persistent missions to coerce and contain Iraq, but with these missions ending new posture requirements must be defined. The effects based methodology framework presented here provides a useful system level model for thinking in terms of optimizing effects as strategy is operationalized.

Airpower will continue to support U.S. interests to preserve stable oil flows, diminish terrorism, promote regional stability, and deter weapons of mass destruction proliferation from a new global posture construct emphasizing agile, expeditionary forces. Extremist sub-state actors, Iranian nuclear ambitions, and uncertain political, economic and social trends increasingly challenge these interests. The regional military strategy for U.S. Central Command focuses on three broad goals of warfighting, engagement, and development. Airpower's precision, global reach and strike, and network centric advances offer decision-makers useful capabilities to support these making continued access to regional basing a strategic imperative.

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I. INTRODUCTION

Since the Iraqi invasion of Kuwait in 1990, airpower has played a significant role in the U.S. security framework for the Persian Gulf region.¹ Through the steady rotation of forward-deployed people and planes, airpower supported not only the expulsion of Iraq from Kuwait but also the ensuing decade of Iraqi containment and compliance missions. In 2003, Operation IRAQI FREEDOM culminated these efforts by eliminating the threat of Iraqi weapons of mass destruction and forcibly creating regime change. Today, the continued role of airpower in the Persian Gulf framework is approaching an important crossroads as old missions end, strategic assumptions change, and uncertain requirements emerge. Soon a new framework and supporting missions must be defined in a strategic environment where the regional threats, relevant actors, and U.S. interests have all evolved.

Over the past half century, the Persian Gulf region has become an increasingly important but problematic area of interest for U.S. foreign policy. The strategic value of the region's oil production and petroleum reserves as well as its history of conflict make it too important to be left unsecured. Following Prime Minister Harold Wilson's declaration in January 1968 of Great Britain's intent to withdraw all forces east of the Suez Canal by 1971, Richard Nixon made the fist of what would become several escalating security commitments to the region by subsequent U.S. Presidents.² Because forward stationing U.S. military forces in the region was politically untenable at the time; U.S. security assurances were based on an over-the-horizon strategy that relied on strengthening regional allies to create a stable balance of power. However, leadership changes and conflicts such as the 1979 Islamic Revolution in Iran, the Soviet invasion of Afghanistan, and the Iran-Iraq War routinely upended this strategy. The turning point though was the 1990 Iraq invasion of Kuwait that brought forward-deployed U.S.

¹ Aerospace power has replaced airpower as the prevailing Air Force term but will not be used for the purposes of this analysis to facilitate emphasis on land-based airpower and its contributions.

² The Nixon Doctrine stated that "the United States would furnish military and economic assistance to nations whose freedom was threatened, but would look to these nations to assume primary responsibility for their own defense." See *Nixon Doctrine Press Statement* (July 25, 1969), www.nixonfoundation.org/Research_Center/1969_pdf_files/1969_0279.pdf (accessed April 05).

military forces to the forefront of a new coercive framework. In this framework, continuous technology infusion increasingly enabled airpower to support a wide range of political goals with an increasingly broad set of capabilities characterized by greater precision, speed, lethality, and scalable effects.

A. ARGUMENT

The post Operation IRAQI FREEDOM (OIF) era poses uncertain strategic and operational requirements on airpower as longstanding missions supporting Operations SOUTHERN WATCH and NORTHERN WATCH end and new ones must be crafted to support the ongoing war on terror and other enduring security interests. Although airpower will continue to operate on a rotational basis, certain steady state roles and requirements must be determined to effectively operationalize a strategy.³ While it is easy to think in terms of what airpower has done or how it has been used in past frameworks as a basis for defining future roles, such reasoning fails to capture the complexity of the situation and the broader relationships at work. Instead, systems level analysis addressing the Gulf's strategic environment, U.S. strategy and policies, and the various coercive and non-coercive roles airpower can play provides a more effective basis. Several important questions underpin such an analysis like: what are the specific threats to U.S. interests in the Gulf, what role does force continue to play in the U.S. strategy, what effects can or should airpower contribute to policy, and how can airpower be best synergized with other instruments of power? In these terms, airpower can be viewed as an influence mechanism contributing to specific effects that ultimately lead to overall policy objectives. Defining and operationalizing its role in a way that maximizes airpower's potential benefits while minimizing the counterproductive adverse effects becomes the strategic art.

The argument here is that airpower will continue to play an important role in joint military operations supporting U.S. policy goals in the Persian Gulf. In its role, forward deployed airpower will be less defined by numbers of fighters and bomber supporting coercive missions, and instead characterized by missions supporting information and enabling operations designed to deny terrorist objectives and provide effective oversight

³ The term 'steady-state' is used to distinguish between the enduring day to day mission requirements and the temporary 'surge' demands that arise to support emerging challenges.

of regional developments. Deterring inter-state conflict will remain important but recent advances in precision and the demonstrated ability to globally hold targets at risk reduces the steady state theater force requirements. Instead, multi-dimensional platforms such as the armed Predator unmanned aerial vehicle can operate in a low air threat environment and provide the necessary reconnaissance and strike capabilities to support ongoing lower intensity missions. This offers to reduce forward footprint requirements as well as overall costs.

The argument centers on four main pillars. First, the Gulf region's vast oil reserves and position as the geo-strategic epicenter of the ongoing global war on terror make it not only a vital U.S. interest but also an increasingly global one. Ongoing U.S. security goals will center on stability, terrorism, weapons of mass destruction (WMD) proliferation, and regional reform. Secondly, U.S. strategy will be executed in an environment increasingly characterized by decentralized terrorist networks, ideological and religious extremism, and transnational sub-state forces. Although the Bush Doctrine speaks of a future characterized by peace, freedom and prosperity where great powers compete in peace rather than conflict, it also emphasizes the important military objective to protect the homeland and establish order in this anarchical environment where violent non-state actors willing to use indiscriminate and potentially catastrophic violence now roam. Third, the U.S. military is transitioning to a new force posture paradigm. Using a capabilities-based approach emphasizing agile, expeditionary forces rather than a threat-based approach allows the United States government (USG) to better meet emerging threats and focus on having the right assets in the right place at the right time. This approach differs from its Cold War predecessor by focusing on desired effects, pre-positioned supplies, and robust access rather than permanently based platforms and structures. Lastly, increasingly enabled by its precision, stealth, global reach, and network effects; airpower plays a vital role in this construct by providing a full range of deterrent, coercive, and confidence building capabilities that can be executed from both over-the-horizon and forward-deployed postures.⁴

⁴ According to the Air Force director of Strategic Planning, General Ronald J. Bath, "the Air Force brings three major operational capabilities to the joint warfighting environment...global mobility, global strike, and persistent command, control, communications, computers, intelligence, surveillance and reconnaissance." (C4ISR). See C. Todd Lopez, "Quadrennial Defense Review Focuses on Future" *Air Force Print News* (25 April 2005) <http://aimpoints.hq.af.mil/display.cfm?id=3019> (accessed April 2005).

B. METHODOLOGY AND FRAMEWORK

Given the broad spectrum of American interests and the diverse array of obstacles facing them, the challenge for policy makers and strategists is to effectively integrate and synergize the nation's influence mechanisms into an overall grand strategy. Often, independently devised sub-strategies will at best leave seams and disconnects or at worst contradict and antagonize each other when brought together. The concept of effects-based operations (EBO) is an emerging framework guiding Air Force strategic thinking about targeting and strategy.⁵ A recent RAND report offers the following EBO definition.

Effects-based operations are operations conceived and planned in a systems framework that considers the full range of direct, indirect, and cascading effects, which may—with different degrees of probability—be achieved by the application of military, diplomatic, psychological, and economic instruments.⁶

This thesis uses an effects-based methodology framework as the overarching analysis construct and metaphor. The framework fosters improved insight into how airpower capabilities fit into the broader system of inter-related actions and aggregate effects desired to create the envisioned outcomes and end-states. To optimize its role, airpower must be thought of both in terms of the physical effects it can bring to bear through conventional target destruction and also the full range of behavioral and non-kinetic effects it can generate to support coercive, deterrent, and assurance strategies. Reference Figure 1 below for a pictorial representation.

⁵ Effects based methodology is a systems analysis that emphasizes maximizing causal linkages between actions to achieve desired effects that ultimately lead to the desired end state.

⁶ Paul K. Davis, *Effects Based Operations (EBO): A Grand Challenge for the Analytical Community* (Santa Monica: RAND, 2001).

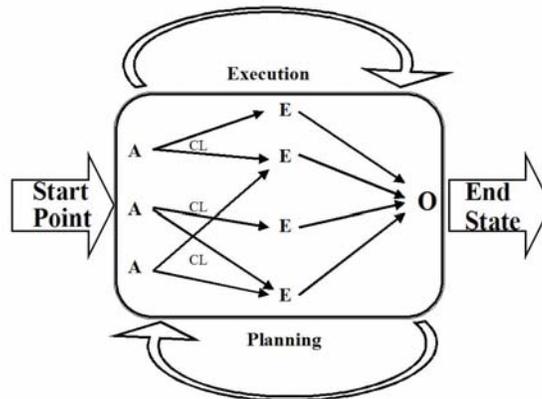


Figure 1. Effects Based Methodology Systems View⁷
 (A=action, CL=causal linkage, E=effect, O=objective or outcome)

As applied to airpower and the Persian Gulf, the *start point* represents the current state of affairs or aggregate strategic environment. The *end-state* reflects what the United States hopes to achieve in the Gulf, whether it be to preserve stability or eradicate the roots of terrorism. The middle box reflects the conceptual inner workings of the strategy whereby specific *actions* are *linked* to interrelated *effects* that collectively achieve the policy *objectives* that over time create the desired end-state.⁸ The two most significant aspects of the model are thinking in terms of desired effects driving actions rather than the opposite and understanding the multiple and higher order effects that each action can be linked to. For example, using B-52s to carpet bomb an Iraqi armor division has the immediate battlefield effect of devastating the division's combat capability, but can also have second order effects of affecting the psychological morale of other divisions and their willingness to fight. However, if the division is located in a politically or socially

⁷ Unknown origin of original EBO diagram. This version adapted from model used in HQ ACC/XO "Effects Based Operations" powerpoint briefing, (January 2002).

⁸ See Robert J. Art, "The Fungibility of Force" in Robert J. Art and Kenneth N. Waltz, eds., *The Use of Force: Military Power and International Politics* (Lanham: Rowman & Littlefield Publishers, Inc., 2004), 14-18. Art emphasizes the concepts of spillover effects and linkages. Spillover effects occur when force is used against force and the result affects other policy domains. Linkage politics involve force being linked to non-military issues in order to achieve other effects.

sensitive area, the attacks could also have broader post-conflict damaging effects on the rebuilding effort.⁹

As the loop arrows show, in the planning stage, analysis begins with envisioning the end-state or dependent variable and choosing measurable objectives and outcomes that will lead to it. From here, politically acceptable and operationally feasible effects are derived that most efficiently and effectively support the desired outcomes. Only then are instruments of power brought in to link distinct actions to the collective achievement of the desired effects. By thinking beyond single level cause and effect, strategists can better account for and control the interrelated higher order effects that various non-integrated actions can have on overall policy. The classic military metaphor for this is the concept of winning the battle but losing the war because of failure to understand the broader implications of a particular battle.

During the execution stage, strategy is implemented by executing the prescribed actions and then monitoring the system's response to confirm progression toward the desired end-state. Because it is a dynamic process, strategy execution is continuously monitored and feedback applied to account for unexpected deviations or new developments. This occurs at the tactical, operational and strategic level with overall success dependent on a clear understanding of the overall national goals at each level. Otherwise, lower level strategies and objectives can lead to conflicting effects and undesirable outcomes that hamper efficiency and effectiveness.

C. ASSUMPTIONS AND CONSTRAINTS

1. Regional Assumptions

While no specific time horizon is stated for this analysis, several assumptions are important to the validity of the arguments. First, it is assumed that Iraq will not erupt into a civil war but will instead increasingly assume responsibility for its domestic security. As a result, the current sizable U.S. ground presence will be withdrawn, which will reduce the daily demand for airlift and combat support sorties. In this future environment, the Iraqi government will maintain favorable ties to the United States and implicitly look to it for external security guarantees as it establishes its domestic

⁹ This example highlights several of the lessons learned from Operation DESERT STORM as presented in Rick Francona, *Ally to Adversary* (Annapolis: Naval Institute Press, 1999), 108, 130.

legitimacy. Across the Gulf, globalization trends will continue to clash with Islamic extremist ideologies, and other underrepresented groups will continue to pressure governments for political reforms. Saudi Arabia, in particular, will face rising internal dissent as it struggles with this problem. Meanwhile, negative anti-Western sentiment in the region will continue to limit U.S. policy options.

2. Nature of Conflict and Strategy

Nuclear weapons and the risk of great power conflict were hallmarks of Cold War security. Today, U.S. conventional dominance reduces the risk of major conventional attack on the United States but also serves to incentivize the use of asymmetric adversary strategies. Correspondingly, the Department of Defense increasingly acknowledges that irregular, catastrophic, and disruptive threats require the same respect and attention that conventional military ones do.¹⁰ The potential use of weapons of mass destruction by individual actors has redefined U.S. homeland security and global military priorities. In this new environment, airpower's global mobility, global strike, and command and control become increasingly important enablers of U.S. force application.¹¹ The challenge becomes operationalizing mission requirements to achieve the strategic goals of assurance, dissuasion and deterrence against these sub-state forces. To successfully pursue global interests in the 21st century security environment, the United States must effectively employ all elements of its national power, as no single instrument is sufficient or desirable in all circumstances. Meanwhile, post conflict stabilization, reconstruction, and the risk of creating another failed state places increased limits on the use of force.

3. U.S. Military Presence

The USG will continue to realign U.S. overseas presence in accordance with the new strategic framework outlined in the recent Global Posture Review. This translates to more responsive and increasingly rotational forces able to bring greater combat power to bear in a shorter time.¹² While the U.S. Central Command 2005 Posture Statement

¹⁰ The 2005 National Defense Strategy focuses on four distinct types of threats to U.S. security: conventional, irregular, disruptive, and catastrophic. See U.S. Department of Defense, *The National Defense Strategy of the United States of America* (Washington, D.C., March 2005), 6-7.

¹¹ The term enabler is used to signify that whether acting alone or as part of a joint mission force, airpower is an indispensable asset that provides key capabilities to support joint military operations.

suggests an eminent shift towards a reduced forward presence emphasizing regional security building missions, regional military forces must retain the capability to fight and prevail without relying on the Cold War assumption of massive reinforcements. Lacking any permanently assigned combat forces, this places significant pressure on Central Command (USCENTCOM), especially in light of the ongoing war on terrorism. The key will be to achieve overmatching power in this paradigm by harnessing the advantages of pre-positioned supplies and bases, rapidly responsive expeditionary forces, and timely air and sea lift.

D. MEASURES OF ANALYSIS & THE ROADMAP

This Chapter introduces the important factors affecting the future role of airpower in the Persian Gulf security framework. It also presents the effects-based methodology framework as a useful tool for thinking in terms of effects as the military instrument of power and specifically airpower is operationalized in the future Persian Gulf strategic framework.

1. Strategic Environment

Chapter II examines how the Persian Gulf strategic environment has changed and outlines the essential domestic, international, military, and national security concerns now shaping the region. The baseline assumption is that the region operates on shared interests rather than shared values, which underscores the complexity of developing a unified regional security system. At the domestic level, economic, political, and social reforms are both desperately needed for long-term solvency but also pose a significant destabilizing threat in the process. Although rising oil prices have relieved some economic pressure, the region must reform and diversify its economic markets in order to stave off future unemployment and poverty crises. Militarily the balance of power has changed following operations in Iraq but remains unstable and dependent on U.S. security guarantees.

¹² Douglas J. Feith, "Transforming the U.S. Global Defense Posture" (Washington, D.C.: Speech to the Center for Strategic and International Studies, 3 December 2003), www.dod/mil/policy/speech/dec_3_03.html (accessed January 2005).

2. U.S. Policy Goals and Strategic Theory

Chapter III examines the currently articulated U.S. strategy and policy guidance as well as the theoretical tenets behind the military requirements of assurance, dissuasion, deterrence and coercive diplomacy. U.S. strategic guidance outlines an American commitment to extend prosperity across the globe, but also a willingness to use force to counter the multidimensional threats to global stability. The Persian Gulf poses a difficult challenge on both accounts. Meanwhile, national defense and military posture requirements are changing as American troops are brought home to be used in a more agile, expeditionary way to rapidly respond to future crises. A collective system of assurance, dissuasion, deterrence and coercion underpin U.S. military requirements, but these concepts are most fully understood in terms of state level threats rather than sub-state ones. Post 9/11 strategies must continue to address how to deter and coerce the new threats operating at the sub-state level.

3. Operationalizing the Gulf

Chapter IV then closes seams between chapters 2 and 3 to draw out operational and theoretical policy implications for airpower in the future Persian Gulf framework. In the current U.S. framework of coercion and deterrence, airpower's battlespace dominance makes it an important part of U.S. strategic deterrence but also a highly useful and effective coercive tool when resorting to force to defend U.S. interests and allies. However, the new expeditionary construct is contingent upon operational access to necessary basing rights that cannot be taken for granted. To preserve future access, the USG must carefully balance future operations against the negative impact they can have on continued regional support. Lastly, while demands for certain capabilities will go down, the need for Air Force command, control, communication, intelligence, surveillance, and reconnaissance (C4ISR) capabilities will continue to place significant deployment demands on certain low density - high demand assets as the quest for useful information increasingly drives mission needs. This questions whether such foundational capabilities can be handled solely through expeditionary operations or must they be transitioned to space for optimum persistence.

Chapter V summarizes the key findings of the research and the resulting policy implications. While the question of airpower's future role in the Persian Gulf security framework has no definitive answer as changing conditions will continue to define specific mission parameters. However, a better understanding of the broader system serves as a useful baseline for optimizing future policy.

II. PERSIAN GULF STRATEGIC ENVIRONMENT

A. INTRODUCTION

A thorough understanding of the internal and external factors shaping regional dynamics is necessary to effectively engage the Persian Gulf region and craft effective policy. This chapter looks at the strategic environment as seen in the national security, domestic, military, and international factors shaping inter and intra-regional affairs. The objective is to identify the emerging issues and characteristics that are most salient to U.S. strategic engagement in Gulf security. The implications being that past policy levers and influence mechanisms must be adapted to both effectively and efficiently achieve U.S. interests. This understanding provides a better baseline for understanding the role airpower can play and the positive and negative effects its presence contributes to. Because the region is intensely complex with important historical precedents, this chapter only seeks to present and summarize the relevant issues as they exist from a U.S. policy standpoint, and not provide an in-depth understanding of each issue that can only be gained from a significantly broader undertaking.

The Persian Gulf region has occupied a lion's share of U.S. political and military attention and resources over the past 15 years. As policy-makers look forward, five characteristics of the Persian Gulf strategic environment stand to have the greatest impact on future U.S. policy: a global dependence on regional oil exports; the rising threat posed by violent sub-state forces; the proliferation of weapons of mass destruction; uncertain political, economic, and social reform trends; and the future stability of Iraq. Given lengthy current energy development cycles and uncertain prospects for alternate energy sources, the Persian Gulf oil exporting countries will remain key figures in the global economy for the next several decades at least. Maintaining regional stability through a functioning balance of power or regional security framework is deemed critical to protecting the flow of oil. However, the rise of sub-state actors and transnational extremist ideologies threaten regional and international order as does Iran's alleged nuclear weapons program. Furthermore, dangerous economic and social trends will exert mounting pressure on authoritarian regimes unable to provide jobs and establish

functional domestic institutions. Lastly, spillover effects from the ongoing Iraq insurgency and prospect for a Shiite dominated democracy could destabilize other Gulf Cooperation Council (GCC) states.

B. DEFINING THE PERSIAN GULF GEOGRAPHIC CONFINES

Geographically the Persian Gulf region comprises eight coastal states bordering the body of water known as the Persian (or Arabian) Gulf. The member states include Saudi Arabia, Iran, Iraq, Kuwait, Bahrain, Qatar, Oman, and the United Arab Emirates (UAE). Collectively the Persian Gulf states have a population of over 129.8 million people, of which 68 million are Iranian.¹³ Islam is the dominant religion and plays an important role in governance, as does the split between the Sunni and Shiite sects.¹⁴ Before the fall of Saddam, Iran stood as the only Shiite ruled nation but current indications suggest the Shia will hold a majority position in the new Iraqi government.



Figure 2. Persian Gulf Region¹⁵

¹³ Central Intelligence Agency, *The World Fact Book 2005* (updated 17 May 2005), www.cia.gov/cia/publications/factbook/docs/faqs.html (accessed March 2005).

¹⁴ During the past century, familial monarchies have dominated regional governance and control across the region. In Bahrain, a Sunni minority maintains control of the government, although the population is approximately 75 percent Shiite. In general though, continued legitimacy and sovereignty remain problematic for the ruling regimes as increased demands for suffrage by underrepresented groups mounts.

¹⁵ Map from "The GULF/2000 Project," <http://gulf2000.columbia.edu/maps.shtml> (accessed March 2005).

C. MILITARY SECURITY ENVIRONMENT

1. Military Balance

The four major players in the Gulf balance of power since the United States formalized its role in Gulf security in 1970 are Iran, Iraq, Saudi Arabia, and the United States.¹⁶ Over the past 35 years, four major intra-regional perturbations to the balance have occurred: the 1979 Islamic Revolution in Iran, 1980-88 Iran-Iraq War, the 1990-91 Iraq invasion of Kuwait, and the 2003 operations to depose Saddam Hussein's weapons of mass destruction potential and establish a democratic Iraq. As a result of this latest event, the historic military balance has changed significantly now that Iraq no longer fields a credible military threat. Iran and Saudi Arabia now stand as the two most significant military powers, although Saudi Arabia and the GCC states are conceptually viewed as a collective balance against Iran.

Historically Iran has posed both a military and a religious threat to the Persian Gulf. In 1979, "the Iranian Revolution replaced the threat of Persian nationalism with that of radical Shiism" as Iran tacitly attempted to export its revolution across the Gulf through subversive means.¹⁷ This threat has subsided with recent Iranian emphasis on establishing trade and security agreements with the Gulf states.¹⁸ Besides having the largest conventional military, Iran has an active chemical and biological weapons programs, an indigenous ballistic missile program, and an alleged nuclear weapons program. Between 1950 and 1977, Iran's defense purchases from the United States totaled over \$11 billion and included the acquisition of major naval and air platforms as

¹⁶ In a report to Congress in 1973, President Nixon made a notable remark on the growing importance of the region because "assurance of the continued flow of Middle East energy resources is increasingly important to the United States, Europe and Japan." See Emile A. Nakhieh, *The Persian Gulf and American Policy* (New York: Praeger Special Studies, 1982), 99.

¹⁷ Riad Kahwaji "U.S.-Arab Cooperation in the Gulf: Are Both Sides Working from the Same Script" *Middle East Policy*, XI, 3 (Fall 2004), 56.

¹⁸ *Ibid.*, 56 -58. Oman first moved to reestablish ties with Tehran in the late 1980s, followed by Saudi trade and cooperation pacts in 2000 and a security agreement in 2001. Qatar also signed a security pact in 2002. While differences persist over issues such as control over the Abu Musa and Tunb islands, Kahwaji characterizes the situation as classic realpolitik similar to the U.S. and China strategic relationship.

well as cutting edge missile technologies.¹⁹ Due to an ongoing lack of spare parts and training, the operational readiness and combat effectiveness of its conventional assets have suffered considerably leaving a significant gap between the quantitative size and the qualitative value. This makes the strategic value of its other programs even greater from a defensive standpoint. Lastly, the Central Intelligence Agency continues to list Iran as the number one state supporter of international terrorism with its Islamic Revolutionary Guard Corp and Ministry of Intelligence and Security planning and supporting both terrorist acts and also terrorist groups such as Hizbollah, Hamas, and the Palestine Islamic Jihad.²⁰

Historically considered the weakest of the three would be regional hegemons, Saudi Arabia significantly bolstered its quantitative military strength through \$65 billion in Foreign Military Sales (FMS) acquisitions from 1950 to 2000.²¹ These purchases included fighter aircraft, airborne early warning and control aircraft, missiles, and its most recent purchase of F-15S aircraft during the 1990s. Whereas population size has historically limited its ability to field a credible military force, the recent population explosion from 8 million in 1970 to 25 million today has largely erased this obstacle. However risk of a military coup combined with external security assurances from the United States suggest the Kingdom is unlikely to alter its course dramatically.

The remaining Gulf states have also funded major armament efforts over the past several decades. However "coordination and interoperability remains extremely limited, robbing the smaller Gulf states of much of their potential military effectiveness."²² As a result, Saudi Arabia and the GCC collectively have quantitative equality with Iran but limited ability to project this power. The following table provides a summary of a few select quantitative indicators or overall military power.

¹⁹ Iranian armament was a critical piece of the U.S. "twin pillars" over the horizon strategy following the British withdrawal in 1968. In this strategy the United States relied on Saudi Arabia and Iran to provide internal and external Gulf security. Saudi Arabia represented an economic and religious power due to its oil exports and possession of the two holiest sites of Islam. Iran represented a military and to a lesser degree oil power as the other pillar.

²⁰ U.S. Department of State, *Patterns of Global Terrorism 2003* (Washington, D.C.: Office of the Coordinator for Counterterrorism, April 2004), 88.

²¹ As presented by Professor James Russell, NS 3362 class notes (May 2005).

²² Anthony H. Cordesman, *The Military Balance in the Middle East* (Westport: Praeger, 2004), 357.

Table 1. Gulf Military Balance²³

	Active Mil End Strength	Tanks	Fixed -Wing Cbt Aircraft	Avg Mil Expen 1997-2003*
Saudi Arabia	150,000	1055	348	\$21,829
UAE	50,500	439	106	\$3,186
Oman	41,700	117	40	\$2,100
Kuwait	15,500	385	81	\$3,471
Qatar	12,400	30	18	\$1,514
Bahrain	11,200	140	34	\$361
Iran	540,000	1,565	306	\$4,672

* (In \$U.S. current Millions)

2. Alliances

The Persian Gulf region lacks a truly effective regional security institution to diffuse the various resource, border, and religious disputes or reduce the risk of interstate aggression. The major emerging questions are where Iraq will look for its future security assurances, and how will this affect U.S. regional policy? Whether or not a more inclusive security framework can or will be formed to address broader concerns and promote greater cooperation remains to be seen, but so far there are not any positive indications. The one standing security institution is the GCC, formed in 1981 to provide collective security in the wake of the Islamic revolution in Iran and the Iran-Iraq War. Overall, it has been unable to achieve a high degree of operational effectiveness as demonstrated by its failure to contend with Iraq in 1990 and continued interoperability problems. During the 1990's, Oman proposed to bolster the size of the Peninsula Shield forces, but despite initially favorable support from the Saudis, the proposal failed. Regrettably a major impediment to GCC functionality may reside with U.S. security guarantees inhibiting necessary coalescing by shielding the states from threats that would otherwise drive functional coordination and cooperation. With the demise of the Iraqi military machine, it becomes even more difficult to define a clear mission for the forces.

D. POLITICAL ENVIRONMENT

While political reform and democratization have swept across Eastern Europe, Latin America and parts of Asia over the last several decades, the Persian Gulf has remained relatively immune to these changes. However mounting internal pressures

²³ Data drawn from Anthony Cordesman, *The Military Balance in the Middle East*; International Institute for Strategic Studies, *The Military Balance 2004-2005*; and Central Intelligence Agency, *The World Fact Book 2005*. Iraq totals have been excluded due to the recent conflict.

from rising populations, economic dysfunction, and perceived corruption are increasingly pressuring the ruling familial elites to effectively contend with the difficult urbanization, modernization and globalization challenges facing the countries. Much attention has been given to the question of whether Islam and democracy can coexist but an equally important question is how much longer the hereditary monarchies can avoid political and social crisis on their current paths. Several states are slowly attempting to implement measured reform policies. Whether these attempts intend to extend greater participation in the political process or simply represent a measured attempt to buy off the problem and 'kick the can down the road' remains to be seen. Either way, these limited liberalization policies may be insufficient for long-term viability if not accompanied by equally needed democratization steps.²⁴ From the U.S. perspective, political reform and democratization are seen as a necessary step toward enduring stability, improved economic functioning and greater social integration. Furthermore they will help undercut the negative conditions fueling support for extremist ideologies. However, U.S. policy makers remain cognizant that America's continued ability to promote positive change and stability is dependent on access to forward bases and formal relationships with regional leaders who must manage anti-American sentiments.

Saudi Arabia represents a particularly acute problem. The royal family continues to struggle for legitimacy while balancing Wahhabi fundamentals and the rising tide of complex social problems accompanying its growing population and rentier state economy.²⁵ While some municipal elections were held in 2004, true power remains vested in the house of Saud. Although still allies, the quality of the U.S. - Saudi relationship suffered considerably over the past decade as Saudi leaders struggled to balance U.S. military operational requirements and the increasing domestic pressure against such actions. Furthermore, media backlash over the revelation that 15 of the 19 terrorists responsible for 9/11 originated in Saudi Arabia further strained the delicate relations. Eventually these trends resulted in the relocation of U.S. military operations from the Kingdom to other regional states to facilitate the Iraq campaign. However while

²⁴ Nora Bensahel, "Political reform in the Middle East" in *The Future Security Environment in the Middle East*, ed. Nora Bensahel and Daniel L. Byman (Santa Monica: RAND, 2004), 15-17.

²⁵ National Intelligence Council, *Global Trends 2015: A Dialogue about the Future with Nongovernment Experts* (December 2000), 20, 71.

no longer host to American troops, Saudi Arabia stills hold a regional position of political power as the dominant oil producer and the guardian of the two holiest sites of Islam.

Peripheral Gulf states such as Bahrain, Kuwait, and Qatar have successfully implemented more significant top-down reforms as seen in the expansion of suffrage rights and the establishment of bicameral legislatures.²⁶ However two near-term threats still menace these efforts. First the prospect of democratic transition is dangerous because "even governments that are honestly attempting to reflect the desire of their people may find themselves pushed aside by revolutionary dynamics, with dire consequences for the people of the region as well as for American interests."²⁷ Secondly, aging leaders and impending leadership transitions could threaten future relations and U.S. policy options in several Gulf states.²⁸ Lacking developed domestic political institutions, religious groups pose the greatest threat as the only entities capable of rallying significant political support, and the fear is that hard-line radicals could successfully trigger unfavorable support for U.S. policy objectives. Nonetheless, these states have proven to be less susceptible to anti-U.S. sentiment and more willing to accommodate American military operations.²⁹

An Islamic theocracy, Iran is perhaps the most democratic country in the region, yet the only one the United States refuses to deal with. An immediate dilemma facing Iran concerns the potential costs and benefits of resuming its nuclear energy program efforts. Rhetoric from both Iranian political leaders and U.S. officials has inflamed the issue, while the European three, Great Britain, France and Germany, attempt to find a diplomatic solution. Should Iran resume uranium enrichment activities it may face sanctioning by the United Nations Security Council, although international consensus for such an action remains questionable. Generally it is argued that Iran has three

²⁶ Bensahal, "Political Reform in the Middle East," 25.

²⁷ Joseph McMillan, "U.S. Interests" in *The United States and the Persian Gulf: Reshaping Security Strategy in the Post-Containment Era* ed. Richard D. Sokolsky (Washington, D.C.: National Defense University, 2003), 13.

²⁸ Kuwait, the UAE, and Saudi Arabia will all likely undergo regime changes in the near future. See Daniel L. Bynam "Implications of Leadership Change in the Arab World" in Bensahel and Bynam, *The Future Security Environment in the Middle East*, 163-177.

²⁹ Overall GCC countries initially objected to the U.S. campaign to depose Saddam Hussein's alleged weapons of mass destruction programs, but ultimately provided critical basing access. See Kahwaji, 55.

fundamental goals for pursuing a nuclear weapons program: the ability to defeat regional adversaries, the ability to deter global intervention, and a desire to establish its position of supremacy in the Middle East.³⁰ Although reform party success at the polls during the late 1990s offered some hope for change on Iran's nuclear ambitions, former Deputy Secretary of State Richard Armitage believes "if you assume the reform movement is one that would eschew nuclear weapons and does not hold the same dreams of glory for Iran, I think you'd be wrong."³¹ As for the reform movement, Iran also faces an upcoming election that will affect the domestic balance of power between the hard-line mullahs and reformers as a lack of positive results has negatively affected Iranian President Khatami and the reform movement.³² Thus, the overall question is not whether Iran faces difficult political problems, but instead what will its future path be as its leaders tackle these challenges and how will these choices affect U.S. policy in the region.

The future stability of Iraq also poses several potentially dangerous problems. The ongoing insurgency is attracting support from extremists in other Middle East countries and may serve as a catalyst for broader long-term unrest in the region. Furthermore, a Shiite dominated government in Iraq may spark increased demands among the largely underrepresented Shia populations in the Gulf states. This is particularly true in Bahrain where a Sunni minority continues to rule over a Shia majority. Given that Iraq's political transition is the product of a violent overthrow of the former regime, it is uncertain whether the Bush administration's vision of a democratic Iraq promoting further liberalization and democratization in the region can be realized in peaceful, measured steps. Additionally in its current state, Iraq no longer serves as a "strategic counterweight to Iran and a check on that country's ambitions."³³ This leaves the GCC states more vulnerable to possible Iranian aggression. Lastly, the risk of a

³⁰ Chris Quillen, "Iranian Nuclear Weapons Policy: Past Present and Possible Future" *Middle East Review of International Affairs* 6, 2 (June 2002), 1.

³¹ Richard Armitage, *Interview with Charlie Rose on PBS* (10 December 2004). www.state.gov/s/d/former/armitage/remarks/39973.htm. (accessed March 2005).

³² Reform party progress began slipping in 2004 following the Council of Guardians exclusion of a large portion of moderate candidates from the ballots. Subsequently, conservatives appear to be regaining ground. See Ghassan Bin Jiddo, "Conservatives take early lead in Iran" *News Global* (22 February 2004) <http://english.aljazeera.net/NR/exeres/6878B263-465D-41C0-BB96-0049039DB10F.htm>. (accessed March 2005).

³³ Kenneth Katzman, *The Persian Gulf States: Issues for U.S. Policy, 2004* (Washington, D.C.: CRS Report for Congress, 4 October 2004), 5.

divided Iraq erupting into a civil war poses perhaps the greatest threat of all. In the north, the establishment of a Kurdish state would certainly impact states outside the region such as Turkey. Likewise, the possible oppression or genocide of Sunni insurgents to establish peace would certainly create a host of problems among southern Gulf states.

E. ECONOMIC AND SOCIAL ENVIRONMENT

The main economic driver in the region is oil, and current projections suggest this will remain so for at least another 50 years. However, the 2002 Arab Human Development Report paints a bleak future picture for the Persian Gulf region. According to statistics and estimates, the region faces impending crises in numerous areas to include population growth, natural resource scarcity, education, and unemployment.³⁴ These trends are redefining the social landscape as poverty and frustration rise. Left untreated, these only stand to spawn more violent extremists who either ignore or don't know "the rules by which our soldiers fight, and who has a gun in one hand, a cell phone in the other, and hatred scorching his heart."³⁵

Oil is the single largest economic driver in the Gulf and constitutes a major portion of the national gross domestic products, with the notable exception being Bahrain, which lacks an active oil field. The bottoming out of oil prices in 1997-98 forced Gulf States to readdress needed economic reforms, but since 1999 oil export revenues have risen from just over \$120 billion to \$349 billion in 2004, greatly relieving the pressure.³⁶ Nonetheless, per capita incomes are still more than 30 percent below their peaks as a rapidly increasing population base increasingly dilutes subsidy payments per capita. Furthermore unemployment and in the case of Saudi Arabia underemployment are becoming a growing problem as rising population rates, an inadequate job base, and large numbers of third country nationals exacerbate the current economic dysfunction. For example, current estimates show Iran facing unemployment rates of over 10 percent and Saudi Arabia an even higher 22 percent.³⁷

³⁴ United Nations, *Arab Human Development Report 2002: Creating Opportunities for Future Generations* (June 2002), 4-13.

³⁵ Ralph Peters, *Beyond Terror* (Mechanicsburg: Stackpole Books, 2002), 325.

³⁶Energy Information Administration, *OPEC Revenues Fact Sheet* (January 2005); www.eia.doe.gov/emu/cabs/opecrev.html (accessed March 2005).

³⁷ Central Intelligence Agency. *The World Fact Book 2005*.

From an international perspective, the vast Gulf petroleum reserves make regional security and stability a vital interest for all oil importing industrial countries. Overall, Persian Gulf states currently provide 27% of the world oil exports with forecasts for this to increase to 33% by 2020.³⁸ As of 2004, Gulf oil reserves were estimated at 715 billion barrels or roughly 57% of global reserves, and the region holds about 45% of the world's proven natural gas reserves as well. Saudi Arabia is the single largest supplier of world oil with 2004 exports officially stated at 7.9 mbd from a production of 9 mbd. Additionally it is credited with having 100% of the world's excess production capacity, roughly 1 mbd. In 2003, approximately 90% of Gulf oil was transported through the Straits of Hormuz between Iran and Oman, making it a critical transportation route. The risk of Iran or others influencing the Straits is a global concern currently secured by the U.S. Navy.

Although the United States only imports 22% of its oil from this region, any drop in global oil supply capability will affect all consumers because oil is a fungible commodity that can easily be rerouted as price and demand dictate. With supplies barely meeting market demands in 2004 oil prices soared and any future supply disruptions will affect the global oil market. Given that the U.S. accounts for 41% of total global oil consumption, the interdependence of the U.S. economy and foreign markets on oil cannot be overstated. Neither can the impact of a forecasted 63% increase in global consumption by 2025 due to significant demand increases by China, India and the United States.³⁹ As such, the "special relationship" between the United States and Saudi Arabia remains an important strategic agreement.⁴⁰

³⁸ Energy Information Administration, *Persian Gulf Oil and Gas Exports Fact Sheet* (September 2004); www.eia.doe.gov/emeu/cabs/pgulf.html (accessed February 2005), 40.

³⁹ Energy Information Administration, *International Energy Outlook 2004*, DOE/EIA-0484 (April 2004); www.eia.doe.gov/oiaf/ieo/index.html (accessed April 2005), 28, 30-34. Current estimates project a global demand increase from 77mbd to 121 mbd by 2025.

⁴⁰ The "special relationship" dates back several decades and operates under the assumption that Saudi Arabia will ensure a stable supply of oil to the global markets and the United States will provide extended security assurances to the region. See Joe Barnes, Amye Jaffe & Edward L. Morse, "Special Energy Supplement: The New Geopolitics of Oil" *Saudi-U.S. Relations Information Service* (6 January 2004), 2.

Table 2. Persian Gulf Oil Production and Exports⁴¹

	Population (million)	Growth Rate	Oil Prod (mbd)	Oil Exports (mbd)	Reserves (Bln barrels)	% of GDP (FY 2004)
Saudi Arabia	26	2.31%	9	7.9	261	40%
Iran	68	.86%	3.96	2.5	130	20%
Iraq	26	2.7%	2.25*	1.49*	112	28%
Kuwait	2.3	3.44%	2.3	1.97	96.5	40%
Qatar	.86	2.61%	.79	.76	16	30%
Oman	3	3.32%	.775	.721	5.5	40%
Bahrain	.69	1.51%	.044	0	-	30%
UAE	2.5	1.54%	2.335	2.5	97.8	30%

* Iraq production estimates are the least stable due to continued violence

F. THREAT PERCEPTIONS

Until recently, Gulf security concerns concentrated on inter-state conflict as the greatest threat to regional stability. Today the threat is increasingly multidimensional with weapons of mass destruction proliferation, asymmetric warfare, and violent sub-state actors pursuing extremist causes becoming more problematic.⁴² While the risk of Iran actually employing a nuclear weapon, should they acquire them, is low; the undesirable second order effect of a nuclear Iran is the likelihood of nuclear breakout by Saudi Arabia, Egypt, or other Middle East countries. Meanwhile U.S. conventional military supremacy carries the negative consequence of making asymmetric strategies based on chemical or biological weapons, irregular warfare tactics, and the use of hard and deeply buried targets of greater value.

The 9/11 terrorist attacks served as a 'wakeup call' to the United States and other countries as terrorist groups demonstrated the transnational nature and devastating potential of their threat. Increasingly enabled by the diffusion of technology, groups such as Osama bin Laden's al-Qaeda terrorist network, Hezbollah, Hamas, Ansar al-Islam, and the Palestinian Islamic Jihad can increasingly attack not only domestic targets but also other international actors. When paired with weapons of mass destruction, the catastrophic potential of a single individual can become devastating.

⁴¹ Data obtained from *The World Factbook 2005, Persian Gulf Oil and Gas Exports Fact Sheet*, (September 2004) and individual country fact briefs. www.eia.doe.gov/ (accessed February 2005).

⁴² Cordesman, *The Military Balance in the Middle East*, 245.

The 2003 *Patterns of Global Terrorism* published by the U.S. Department of State documents several measures taken by Gulf states to combat terrorist financing, operations, and safe havens.⁴³ Saudi Arabia has bolstered its counter terrorism efforts on both international and domestic fronts. It has significantly increased efforts to delegitimize terrorist efforts and restrict their financing as well as increase its counter-terrorism raids and operations. The UAE publicly condemned terrorist acts and tightened its internal financial controls to restrict terrorist funding. Kuwait, Bahrain and Qatar have also taken measures to restrict terrorist funding and increase domestic security efforts. Collectively, the nations are making important strides but much remains to be done.

G. U.S. POLICY IMPLICATIONS

U.S. foreign policy in the Persian Gulf has gone through several event-driven changes over the past five decades beginning with President Roosevelt's historic meeting with King Ibn al Saud, through the Nixon, Carter and Reagan Doctrines that systematically increased U.S. military commitments to the region, and finally the 1990 turning point that brought a continuous rotational presence of American troops to Arab bases. Today, the liberation of Iraq, threat of weapons of mass destruction, and rise of transnational sub-state actors have significantly altered the Persian Gulf strategic environment and warrant a reevaluation of policy. For decades, U.S. containment strategy focused on "harsh economic sanctions as well as forward military deployments in the region, including an explicit deterrence policy based upon military threats."⁴⁴ These influence mechanisms were designed to target states rather than the sub-state forces pervading the strategic landscape today. The implications being that past policy levers and influence mechanisms must be adapted to both effectively and efficiently achieve U.S. interests in the future.

The future balance of power in the Persian Gulf remains uncertain in the wake of the Iraqi liberation. In the near to medium term, Iraq will be forced to rely on external power(s) to provide for its international security. Who it chooses to align with will have important implications for U.S. policy. The possibility of a nuclear Iran also poses a threat to the currently manageable balance of power between Iran and the GCC states.

⁴³ U.S. Department of State, *Patterns of Global Terrorism: 2003*, 58-71.

⁴⁴ Kahwaji, 56.

Should Iran go nuclear, the United States must decide how it will assure its allies without creating an escalating security dilemma with Iran. Furthermore, nuclear weapons would also significantly impact the U.S. ability to ensure security for its regionally based forces. Overall, GCC states will remain dependent on U.S. security guarantees despite their significant military investments, a situation that benefits U.S. foreign policy.

Recent military operations in the region since 9/11 have adversely affected overall public sentiment regarding the U.S. military presence in the region. The United States has already lost the ability to operate from Saudi bases and must carefully weigh the costs and benefits of future operations against the possible loss of further regional support. The recent formalization of U.S. security cooperation agreements with GCC states during the 1990s alleviates these concerns somewhat but not completely. Lastly, the United States must continue to inspire and convince regional states to assume greater policing responsibilities in combating terrorist activities.

Uncertain political reform and terrorist activities also pose a dynamic threat to Gulf oil operations. The United States must carefully consider how it would respond to intra-state events that could threaten the continued flow of oil, especially in the case of Saudi Arabia. As was emphasized in the liberation of Iraq, any future coercive military responses must address the need to prevent adverse collateral damage that could lead to creating future failed states. This places important restrictions on the use of force that can negatively impact the overall utility of force as an influence mechanism. As for oil and possible regime change, the dependence of regional markets on oil exports to fund their economies suggests that any regimes whether favorable to the United States or not will need to continue to produce oil to sustain their economies.

The lack of a clearly defined objective end-state by current terrorist organizations complicates the process of attempting to affect their cost-benefit rationale. Organizations such as al Qaeda seemingly know what they are against, but not what they are for. While intent to dislodge the infidel occupiers and plunderers from the Middle East, the organization seems to lack a defined objective beyond this.⁴⁵ Furthermore, the

⁴⁵ As drawn from the alleged statement from Osama bin Laden, "Declaration of the World Islamic Front for Jihad against the Jews and the Crusaders," presented in Bernard Lewis, "License to Kill: Usama bin Ladin's Declaration of Jihad" *Foreign Affairs* (November/December 1998), 14-19.

transnational nature of these terrorist groups today also presents the major policy problem. Increasingly terrorist cells lack centralization with a single government or geographic location and therefore become more difficult to target. They also create a battle to win the "hearts and minds" of the general population whose tacit approval they require in order to operate with anonymity. As such it becomes difficult for the United States to measure effectiveness or progress given the lack of transparency in the region. While some rogue states like Afghanistan were transparent in their support for these actors, other states can become unwilling accomplices because of the inability to effectively extend force across their borders. The ongoing global war on terrorism attempts to address the problem at several levels, but until the underlying ideological root causes can be resolved, military and economic actions to deny terrorist's safe havens, financing, and security will only address the symptoms of the problem.

H. SUMMARY

First and foremost, any strategic assessment must be understood as simply a perception of reality. Each actor has his or her own unique interpretation of the various factors affecting the region. This chapter establishes an analytical "start point" for thinking in terms of future end-states and the obstacles to them that will affect U.S. policy. The strategic environment in the Persian Gulf remains complex and offers no simple solutions to solve the diverse threats to future stability. Despite removing Saddam Hussein from power, the prospects for regional stability remain uncertain. What is certain is that the Persian Gulf oil exporting countries will remain key figures in the global economy for at least the next several decades, as there are no currently viable alternate energy programs to replace oil. However, maintaining regional stability in light of the mounting political, economic and social pressure on the governments will be problematic. While the United must remain engaged and not withdraw from the region, it must also be cognizant of the need to measure unilateral policies against the anti-U.S. sentiment they can create.

Militarily Iran and the collective GCC are now the dominant regional powers as the Gulf states have heavily invested in their militaries over the past several decades. However both sides are plagued by poor overall combat capability. Iran's problems center on the lack of spare parts and readiness for its conventional forces, while the GCC

states' operational effectiveness remains hampered by interoperability and doctrine shortfalls. Nonetheless, the GCC has quantitative conventional parity with Iran, although Iran's indigenous ballistic missile, chemical and biological weapon, and alleged nuclear weapon programs make it a more formidable threat. The United States remains the pivotal external player providing explicit security guarantees to the GCC member states while also exerting political and economic pressure on Iran.

Politically the region is ruled by hereditary monarchies under increasing internal and external pressure to reform the political processes. Religious extremists promote a retrenchment strategy aimed at locking out Western influence and preserving certain religious fundamentals while others push for greater global integration and extension of rights. Many states have been on slow reform paths for several years and are extending voting rights, establishing representative legislative bodies, and instituting liberalization policies. The dilemma becomes whether the governments can successfully control the tide of change and prevent violent upheaval given the complex social and religious tensions underlying the changes. Iraq's path to democracy will likely play an important role in affecting change across the region, but the exact role remains up for debate.

Economically, the Gulf states are heavily dependent on oil exports as a main source of state income. The recent spike in oil prices has tripled export incomes from their lows in the 1997-98 timeframe and given the governments a little breathing room. However, long-term economic stability hinges on economic reform to promote greater value change diversification. Otherwise the ongoing population explosion will continue to drive unemployment, poverty, and frustration within the burgeoning youth population.

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III. U.S. POLICY GOALS AND STRATEGIC THEORY- ESTABLISHING A BASIS FOR THE PERSIAN GULF SECURITY FRAMEWORK

A. INTRODUCTION

Building off of the context provided in Chapter II, this chapter examines the emerging U.S. strategic guidance for achieving the Bush administration's desired end state in the Gulf. This establishes the basis for understanding the desired effects that airpower strategy must support. First, it is argued that military power and the threat and/or use of force remain necessary tools in foreign policy. The question is not if force plays a role but how and when it should be emphasized. Next, the overall strategic aim of extending peace, freedom and prosperity is presented as seen in current national security and defense documents. Today the USG is currently waging a two-front external war. One the one hand, the Global War on Terrorism (GWOT) marks a somewhat unbounded effort to globally engage terrorist organizations on their turf before they have a chance to strike the U.S. homeland. Since the September 11th, 2001 terrorist attacks [9/11], GWOT has been the overarching U.S. strategic aim and heavily vested in the use of force, as seen in Afghanistan and Iraq. The other front consists of the steady-state goals of assurances, dissuasion, and deterrence to avert future crises and build an enduring peace. With an annual budget in excess of \$400 billion dollars, the Department of Defense must naturally play an important role in securing these goals. The new global defense posture construct suggests the United States can and must secure its interests with fewer but more capable forward forces supported by expeditionary stateside reserves. This represents a paradigm shift from the Cold War construct designed to enable the U.S. military to better support operations across a variety of possible theaters and has important theoretical implications for the concepts of assurance, dissuasion, deterrence, and coercion.

B. BACKGROUND

At the dawn of the 21st century, the United States stands as most powerful nation on earth as measured in all relevant forms of power and influence: economic, military, political, informational, and even cultural. However even with such power, it is not

immune to threats and challenges. Today the singular Cold War focus on a superpower rival has been supplanted by an increasing array of irregular, catastrophic and disruptive threats that cannot be ignored and should not be underestimated. To protect a state's interests, security goals and strategies are formulated. At the national level, these reflect the leadership's perception of the threats facing the state and the acceptable costs and risks the state is willing to incur to address them. From this guidance, specific sub-strategies and objectives are operationalized to bridge goals to specific actions. Home to the world's largest known petroleum reserves, the Persian Gulf remains an important strategic interest of the United States that must be protected. As the 2002 National Security Strategy (NSS) points out, intrastate violence and instability may be the new coin of the realm in the "arc of instability" that encompasses the Persian Gulf region. Given the U.S. interest to maintain regional stability and the continued flow of Gulf oil to the global market, effectively integrating and optimizing the military instrument of power is an important component to the overall U.S. strategy.

In the Persian Gulf, the free flow of oil has been the strategic imperative for decades but the global war on terror and weapons of mass destruction have also become increasingly important. America's emergence from World War II as the leading industrialized nation cemented its formal interest in the stable flow of oil from Persian Gulf reserves. American strategy to protect the free flow of oil to global markets and ensure regional stability varied both with respect to its major allies and the operational framework. A key goal has been to deter aggression amongst the major member nations with hegemonic desires. Prior to 1990, the United States relied on regional allies supported by over the horizon security guarantees to maintain a balance of power in the Persian Gulf. While no permanent American forces were stationed in the area under the twin pillars construct the United States and Saudi Arabia began establishing a regional basing infrastructure to support American crisis response as a precaution. In 1979, the Islamic Revolution in Iran and the subsequent Lebanon hostage crisis upended the twin pillar strategy as well as U.S.-Iranian diplomatic relations. Subsequently during the 1980's, U.S. strategy attempted to balance Iraq against Iran as they fought their 8-year war. However, this strategy too was overcome by events when Iraq invaded Kuwait and U.S. forces were brought forward to the theater. During the 1990s, this drove five

functional strategic imperatives: dual containment of Iran and Iraq, promoting regional stability through extended security assurances, strengthening the GCC alliance, preserving freedom of navigation, and enhancing human rights and democratic development.⁴⁶ In the ensuing decade of 'No Fly Zone' missions, the United States repeatedly used coercive airpower in response to Iraqi non-compliance with United Nations Security Council Resolutions as it employed its strategy of dual containment.⁴⁷ Events surrounding 9/11 terrorist attacks and the removal of Saddam Hussein from power mark the most recent strategic adjustment of U.S. strategy in the Persian Gulf.

As it relates to the Persian Gulf region, the current NSS outlines a more aggressive posture to deny terrorist sanctuaries, stop WMD proliferation, and enable domestic social, economic and political reform.⁴⁸ Although President Bush emphasized "the only force powerful enough to stop the rise of tyranny and terror, and replace hatred with hope, is the force of human freedom" in his 2005 State of the Union address, an aggressive posture of forward-deployed forces ready to preempt threats when needed has emerged.⁴⁹ However even as the sole superpower, the United States has limited resources with which to pursue its interests and waging war is never cheap or easy. The 1991 Persian Gulf War is estimated to have cost \$84 billion in FY 04 dollars, although only \$6.4 billion was paid for by the United States.⁵⁰ In contrast, major combat operations in Afghanistan cost the United States \$7.9 billion over a 7 month period, and major combat operations in Iraq from January 2003 through May 2003 cost \$21.0 billion dollars. However costs only soar once major combat operations are complete. As of May 2004, stabilization and peacekeeping operations totaled \$34.9 and 72.4 billion respectively for Afghanistan and Iraq. This is compared to only \$5.9 and \$15.0 billion

⁴⁶ United States Department of Defense, *United States Security Strategy for the Middle East* (Washington, D.C., Office of International Security Affairs, 1995), 5-10.

⁴⁷ These included Operation VIGILANT WARRIOR, Operation DESERT FOX, and almost daily limited attacks from 1998 onward. Dual containment was coined by the Clinton Administration in 1993 as the overarching policy construct for engaging Iraq and Iran.

⁴⁸ U.S. President, *The National Security Strategy of the United States of America* (Washington, D.C.: The White House, 2002), i-iii.

⁴⁹ George W. Bush, *State of the Union Address* (02 February 2005), www.state.gov/r/pa/ei/wh/rem/41479.htm (accessed March 2005).

⁵⁰ U.S. Department of Defense, *Defense Science Board 2004 Summer Study on Transition to and from Hostilities* (Washington, D.C., December 2004), Appendix D1, D2.

for Kosovo and Bosnia. Today, the totals for Iraq have continued to climb and seriously raise the question the true costs of using force.

C. FORCE AND POLITICS

States competing in a system of anarchy dominated by competition for scarce resources and security is a fundamental proposition of realist theory.⁵¹ Ultimately states have numerous tools at their disposal to pursue their interests, but achieving those interests is ultimately determined by the state's ability to project meaningful power. Such power is typically divided into four main types: diplomatic, informational, military and economic (DIME). Robert Art suggests states can use military power either "peacefully" or "forcefully," but both roles are integral to foreign policy.⁵² In the peaceful sense, states can threaten and intimidate to achieve desired objectives, and should such efforts fail, they can resort to the physical use of force through coercion or war. While government maintenance of a monopoly on the legitimate use of force is fundamental to the domestic functioning of the modern nation state, no overarching institution or authority maintains such a legitimate monopoly at the international level.⁵³ Instead "in international politics force serves, not only as the ultima ratio but indeed as the first and constant one."⁵⁴

Essentially, the NSS espouses the view that the United States will use its unparalleled power to help others achieve the benefits of peace, freedom, and prosperity. A fundamental requirement for this vision is a safe world where all players operate under a generally accepted "rule set" of normative behaviors.⁵⁵ However, the USG also recognizes that violent non-state actors and weapons of mass destruction increasingly pose a dangerous threat to the international order and all instruments of power must be brought to bear against them. Although preemption has been used in Iraq and remains a

⁵¹ Kenneth N. Waltz, *Theory of International Politics* (Boston: McGraw Hill, 1979). 88, 111-128.

⁵² Art, "The Fungibility of Force", 3

⁵³ Waltz, *Theory of International Politics*, 103-04.

⁵⁴ Waltz quoted in Robert Art "The Fungibility of Force," 5-6.

⁵⁵ See Thomas P.M. Barnett, *The Pentagon's New Map* (New York: G.P. Putnam's Sons, 2004), 82. Barnett asserts that America's foremost interest today lies in "the extension of global economic connectivity" to disconnected gap countries. This drives the need for "rule sets that define fair play among nations...not just in trade but in terms of war...no longer restricted to organized violence between nation-states."

controversial subject, deterrence and willingness to resort to coercion remain the backbone of U.S. defense strategy. As the hegemon, the United States can use force more freely than its adversaries can but this does not mean it should.⁵⁶

D. THE GRAND STRATEGY

Today the United States enjoys a position of unparalleled military strength and great economic and political influence.⁵⁷

The purpose of the National Security Strategy is to set the overall vision of how the U.S. sees the world, its role in it, and the overarching construct for how it will use its resources and engage its allies to meet the challenges. Two important themes emerge in the 2002 NSS characterizing the American view- integration and uncertainty. Richard Haas characterizes the current strategy as one of integration aimed at "bringing nations together and then building frameworks of cooperation and, where feasible, institutions that reinforce and sustain them even more."⁵⁸ However the path to global prosperity is littered with obstacles. While great power war has declined, new threats have emerged, and strong second pillar to the Bush Doctrine is the commitment to use American power to reestablish order and stability at the crossroads of radicalism and technology. Overall, the U.S. faces a complicated picture of competing demands, catastrophic threats, and uncertain dilemmas. As the only nation with the ability to do so, the United States accepts its manifest responsibility to "help make the world not just safer but better" by advancing the goals of "political and economic freedom, peaceful relations with other states, respect for human dignity."⁵⁹ As daunting as the task is, it is made even more difficult by the inherent uncertainty posed by the post Cold War change in relevant actors, threats, and missions. The catastrophic potential of lone individuals to target innocent civilians has left the United States reluctant to rely solely on the long-term possibility that international institutions and diplomatic processes can work. Instead,

⁵⁶ See G. John Ikenberry, *After Victory: Institutions, Strategic Restraint, and the Rebuilding of Order After major Wars* (Princeton: Princeton University Press, 2001), 22-29. The United States preference is for a functional regional balance of power in the Gulf. However as the hegemon, it is willing to act as required to preserve stability. Ikenberry argues that strategic restraint is important in a hegemonic order though to minimize counter balancing and lower the cost burden.

⁵⁷ *The National Security Strategy of the United States of America*, preface.

⁵⁸ Richard N, Haass, "Defining U.S. Foreign Policy in a Post-Post-Cold War World" (New York: Remarks to the Foreign Policy Association, 2002 Arthur Ross Lecture, 22 April 2002).

U.S. policy has shifted from "detering predictable threats, towards responding to unpredictable threats after they emerge, making questions of how to compel states [or other actors] to alter their behavior more central in international politics."⁶⁰

Despite a position of unmatched power and influence referenced in the opening quote, America is not free from threats to itself or its interests. The government's first priority is to defend America's homeland. Additionally, the United States vows to protect and support its allies and friends from a threat increasingly characterized by "shadowy networks of individuals [who] can bring great chaos and suffering to our shores for less than it costs to purchase a single tank."⁶¹ A threat linked more to failing states, uncontrolled borders, catastrophic technologies, and extremist ideologies than to conventional armies. Preserving the peace and defeating these challenges to freedom and prosperity will not happen over night or in a single decisive battle. It will require a persistent global effort spanning religious, economic, military, and social domains.

The Bush administration argues "in the new world we have entered, the only path to peace and security is the path of action."⁶² To succeed, America must "strengthen alliances to defeat global terrorism and work to prevent attacks against us and our friends."⁶³ As such it must use "all elements of our national power and international influence to attack terror networks; reduce their ability to communicate and coordinate their plans; isolate them from potential allies and from each other; and identify and disrupt their plots before they attack."⁶⁴ The most profound change to the international "rule set" articulated in the National Security Strategy though is the readiness to use preemptive force if necessary. Recent missions in Afghanistan and Iraq are testament to the willingness to act decisively to disrupt the destabilizing terrorist threat characterized by Osama bin Laden and al-Qaeda. However, the true targets of preemption are not

⁵⁹ *The National Security Strategy of the United States of America*, 1.

⁶⁰ Robert Pape, *Bombing to Win: Air Power and Coercion in War* (Ithaca: Cornell University Press, 1996), 2.

⁶¹ *The National Security Strategy of the United States of America*, preface.

⁶² *Ibid.*

⁶³ *Ibid.*, 5.

⁶⁴ U.S. focus is to defeat, deny, and defend by taking the fight to the enemy. See George W. Bush, "President Bush Releases National Strategy for Combating Terrorism" (Washington, D.C., White House Press Release, 14 February 2003), www.state.gov/s/ct/rls/rm/2003/17798.htm (accessed March 2005).

functioning states but sub-state forces and rogue actors attempting to operate outside established norms according to Barnett.⁶⁵

Terrorism itself is not a new concept, but what has changed is the transnational and destructive potential of terrorist threats today. Weapons of mass destruction in the hands of individuals or groups intent on willful killing of innocent civilians and non-military targets pose "one of the greatest security challenges facing the United States."⁶⁶ Therefore, "as with the war on terrorism, our strategy for homeland security, and our new concept of deterrence, the U.S. approach to combat WMD represent a fundamental change from the past."⁶⁷

The changing characteristics of conflict as waged by the American military and the acknowledged fact that the ongoing war on terrorism "will be fought on many fronts against a particularly elusive enemy over an extended period of time" have profound implications on the perceived role of force in foreign policy.⁶⁸ The ability to project credible military power and the resolve to use it if necessary is a fundamental requirement to influencing would be adversaries, state or sub-state level. As the global hegemon, the United States can use force more freely than other states but as global backlash from Operation IRAQI FREEDOM (OIF) shows the costs can be high, especially if operating from inadequate intelligence. Militarily the United States has a conventional advantage over any current adversary that enables it to better control the pace, escalation, and nature of conventional conflict. However, adversaries using irregular tactics to avoid massing in the open obviate many U.S. advantages. This places demands for new military capabilities that can affect these actors.

E. TRANSLATING DEFENSE AND MILITARY STRATEGY

Based on the overarching guidance established by the NSS, the National Defense Strategy (NDS) continues the iterative process of establishing military objectives,

⁶⁵ Barnett, 167-171. Barnett argues that the globe is essentially divided into 2 groups- one functioning inside globalizations rule set and another disconnected gap unable to integrate into the core. Collective security inside the core will not be altered because preemption is only targeted at rogue actors in the gap.

⁶⁶ U.S. President, *The National Strategy to Combat Weapons of Mass Destruction* (Washington, D.C., The White House, 2003), 1.

⁶⁷ *Ibid*, 1.

⁶⁸ *The National Security Strategy of the United States of America*, 5.

missions, functions and required capabilities. Fundamentally, defense policy and guidance suggest the desire to create a shared sense of global responsibility for future stability and peace, backed up by the willingness to assert U.S. primacy to enforce it. The four overarching strategic objectives include: establishing and preserving peace by protecting the U.S. homeland, ensuring global freedom of action, increasing alliance capabilities, and promoting favorable security conditions.⁶⁹ To achieve these, the NSS outlines a ladder of four broad military tasks designed to achieve favorable behavior and physical effects by:

- Assuring our allies and friends;
- Dissuading future military competition;
- Deterring threats against U.S. interests, allies, and friends; and
- Decisively defeating an adversary if deterrence fails⁷⁰

The first three military requirements of assurance, dissuasion, and deterrence function to preserve stability and the status quo, while achieving decisive defeat of an adversary involves creating a new and more acceptable end state. However they are all interrelated as actions at each level can mutually support or detract from overall effectiveness at the other levels. For example, they all function to influence adversary perceptions and behavior, and a failure at one level can affect perceptions of U.S. credibility and resolve at other levels. Although the NSS does not delineate a separate distinction for coercion between deterrence and defeat, coercive diplomacy has been and will continue to be an important subject in the era of military operations other than war. The major challenge today is determining how to operationalize these concepts in a way that can decisively affect seemingly non-deterrable extremists who glorify suicide tactics.

1. Threats

Today the U.S. defense establishment increasingly accepts that the current threat is not posed by a conventional military peer competitor but instead by potential adversaries posing irregular, disruptive, and catastrophic threats that attempt to deny and

⁶⁹ U.S. Department of Defense, *The National Defense Strategy of the United States of America* (Washington, D.C., 2005), 6-7.

⁷⁰ *The National Security Strategy of the United States of America*, 29.

counter U.S. military advantages.⁷¹ Irregular challengers employing long-term tactics can attempt to erode U.S. will or raise political and operational costs to an unacceptable level. They can also attempt to influence U.S. options by targeting key third parties such as state governments providing U.S. basing access. These threats also commonly resort to using non-combatant medical and religious establishments to complicate U.S. targeting. When adversaries combine elements of threat types together, the problem becomes even more difficult to manage. For example, a prominent concern today is the risk of terrorist groups or rogue states with access to weapons of mass destruction. Such actors pose a potentially catastrophic threat to U.S. security and must be detected and destroyed before they can act. The current questionable existence of suitable targets to hold hostage as a deterrent to these groups questions the viability of force in solving this problem and demands the military develop new concepts of operation and capabilities to prevail.

The national military strategy (NMS) stresses the importance of agility, decisiveness and integration for future military forces.⁷² In an international security environment characterized by uncertainty, the ability to rapidly respond with robust capabilities enables the United States to maintain the initiative. Given the vast number of potential adversaries today, a capabilities-based approach to achieve overmatching power with just the right amount of forces is critical to managing operations tempo.⁷³ Ongoing transformation efforts to develop tailored, networked, expeditionary forces will continue to shift the advantage in favor of the U.S. military. However to succeed in the long term against the rising tide of terrorism, the USG must use all of its instruments of power to deny political sanctuary, eliminate global funding, develop effective ideological counter-narratives, and create a global web of coalition states working together.

⁷¹ The U.S. military strategy has historically focused on state level threats. Irregular threats involve adversaries using unconventional warfare means. Catastrophic threats involve the threat of weapons of mass destruction, and disruptive threats center on exploiting future technologies to erode U.S. advantages. See *The National Defense Strategy of the United States of America*, 2.

⁷² United States Department of Defense, *National Military Strategy of the United States of America*, 1st ed. (Washington, D.C., Joint Chiefs of Staff, 2004), 7.

⁷³ Operations tempo denotes the negative impact of persistent operations on personnel, equipment and overall war fighting readiness.

2. Posturing the Force

We have entered an era of enemies without country or conscience, who operate in small cells scattered across the globe. Yet our forces continue to be arranged essentially to fight large armies, navies, and air forces. The world has changed, and so must we.⁷⁴

Recently the Department of Defense began releasing details of its Global Posture Review (GPR) with a lot of attention focusing on the realignment of forward-deployed forces in Europe and Asia. In all, current estimates are that up to 70,000 troops will be relocated to the continental United States.⁷⁵ However, the review has broader implications for future military presence across the globe, especially in the Middle East where no permanent combat forces are assigned. Rather than signaling an American withdrawal from the international security environment, the new posture allows America to flexibly respond to a wider range of emerging crises before they become politically untenable. The impetus behind this effort was the need to realign U.S. capabilities to meet the uncertain nature of the current threat environment. The result is a focus on expeditionary forces capable of rapidly responding to developing crises across the globe. These future forces will be more agile, responsive, and possess greater capabilities than their Cold War counterparts as a result of transformation driven technological advances and doctrinal improvements. Strategically, they will deploy as required to meet emerging mission requirements and conduct routine training and exercises rather than being permanently based. To succeed, the plan relies on a robust network of forward basing options characterized as either traditional main operating bases (MOB) with permanent forces and robust infrastructure, forward operating sites (FOS) capable of supporting rotational forces, or more austere cooperative security locations (CSL) for contingency purposes.⁷⁶ These basing requirements drive the need to expand security agreements and bring the added effect of enhanced diplomatic and economic relationships with regional allies serving as host countries.

⁷⁴ Donald H. Rumsfeld, "Positioning America's Forces for the 21st Century" *Department of Defense Editorial* (23 September 2004), www.dod/mil/home/articles/2004-09/a092304b.html (accessed May 2004).

⁷⁵ David Isenberg, "The U.S. Global Posture Review: Reshaping America's Global Military Footprint" *BASIC NOTES* (19 November 2004), www.basicint.org/pubs/Notes/BN041119.htm (accessed May 2005).

⁷⁶ *The National Defense Strategy of the United States of America*, 19.

The new concept also hinges on strategic sea and airlift effectively surging forces forward from garrison to the area of operations. This requires the use of pre-positioned theater supplies and increased use of operational reachback.⁷⁷ The 1991 Persian Gulf War seemingly validated this concept as U.S. forces deployed forward to pre-established Saudi airfields. However in reality it took the military about six months to fully transition and ready itself for major combat. It is increasingly unlikely that a future adversary will allow a similar convenience. Thus it becomes imperative that regional allies share the burden of peace by increasingly their self-defense capabilities and improving interoperability with the U.S. military through proper investment. Unfortunately, with the U.S. defense budget nearly equaling that of the rest of the world combined, technological interoperability is trending further away rather than closer together.

Reachback can be decisive because it "gives us the opportunity for multiple theater commanders to access a capability and serve multiple customers simultaneously" because "we don't need the assets physically located on the deployed base proper to access their resources or capabilities."⁷⁸ For example, the need for ISR film and data processing facilities in theater is reduced as the data can be more quickly transferred electronically to analysis center in the continental United States (CONUS). Similarly, the proliferation of unmanned aerial vehicles (UAV) enables less forward footprint as the pilots, planners, and information analysts can all be centrally located outside the theater.

3. Functional Framework

In the new defense strategy, the requirement to shape, size and posture the U.S. military for two major regional wars has been replaced by a new framework commonly referred to as the 1-4-2-1. First and foremost, the U.S. military will defend the U.S. homeland, but it will also deter aggression and coercion forward in four critical regions. Furthermore, the military must be prepared to swiftly defeat aggression in two

⁷⁷ Reachback is defined as "the process of obtaining products, services, and applications or forces, equipment, or material from Air Force organizations that are not forward deployed." Air Force Doctrine Document 1-2, *Air Force Glossary* (24 August 2004), 37.

⁷⁸ Maj Gen Daniel P. Leaf, Director of Air Force Operational Requirements, quoted in A. J. Bosker, "AF Relies on Reachback Capabilities" *Air Force Print News* (23 January 2002), www.af.mil/news.Jan2002/n20020123_0111.asp (accessed March 2005).

overlapping campaigns while preserving the ability to win decisively in one of them.⁷⁹ In this construct, forward-deployed forces must be capable of rapidly responding to emerging events with the expectation for follow-on forces to surge into theater to fight a major campaign. However in a dual conflict scenario, possessing sufficient airlift could become a limiting factor and must be accounted for when defining steady state requirements. When not engaged in conflict, forward deployed forces can expect to be involved in a variety of lower intensity missions such as humanitarian operations, non-combatant evacuations, peace operations and limited strikes supporting the global war on terror, as well as regional exercises and training missions.

F. UNDERSTANDING THE MEANS BEHIND THE STRATEGY

In the strategy formulation process, identifying how airpower can and should be used to achieve desired effects that support the national goals is the operational art. As the NSS states, the desired outcomes are to assure, dissuade, deter and if required defeat adversaries. From these, specific military objectives, mission, and desired capabilities can be developed to maximize desired effects while also minimizing counterproductive or negative consequences. This section examines the concepts of assurance, dissuasion, deterrence and coercion from a theoretical standpoint to identify the key tenets and requirements that affect future strategy.

1. Assurance

Assurances essentially attempt to reduce the likelihood of escalation to conflict by addressing the adversary's needs or weaknesses through dialogue and other physical measures.⁸⁰ They also signal commitment to allies as a means to relieve tensions. Military forces are important because "the forward presence of American forces overseas is one of the most profound symbols of the U.S. commitments to allies and friends."⁸¹ Airpower's rapid global mobility and global strike capabilities enable the United States to reassure allies without the requiring continuous forward presence.

⁷⁹ *The National Defense Strategy of the United States of America*, 16-17.

⁸⁰ Definition adapted from Janice G. Stein "Reassurance in Conflict Management" *Political Science Quarterly* 106, 3 (1991), 432.

⁸¹ *The National Security Strategy of the United States of America*, 29.

2. Dissuasion

At its roots, dissuasion reflects a bold and hegemonic view of U.S. military power by attempting to convince potential adversaries that they cannot compete with or succeed against the United States. Essentially the United States will possess overwhelming offensive and defensive capabilities so that would be challengers will realize any attempts to challenge U.S. supremacy are futile and ultimately elect not to attempt to do so because of the high costs. While the costs of maintaining this superiority can be high, the assumption is that the potential for long-term peace and stability will more than offset them. Given the high price tag for ongoing conflict and stability operations in Iraq, this assumption may be true in some cases. However al-Qaeda and the Iraqi insurgents have demonstrated that counter-denial and counter-deception strategies will be attempted.⁸² Furthermore, the rapid global diffusion of information technologies enables individuals and groups to operate across state borders without having to physically mass bodies by as cellular phones and the Internet have become universally available. This significantly alters the scope of effort required to effectively monitor, engage, and deny these groups.

Under the realist paradigm, actions to develop and maintain asymmetric military advantage over others, without an international mandate for such a powerful position, necessarily creates a security dilemma for other states, ally or adversary.⁸³ With the separation of offensive and defensive systems becoming less distinct, the problem only escalates. Furthermore, whether U.S. efforts are intended as benevolent or not, it is the perceptions of other states that ultimately matters most. Even if they accept the proposition of dissuasion, the fact remains they do not and will not always agree with all U.S. policies, and this can create tensions between allies and the United States as seen in the fallout with European allies over Iraq's weapons of mass destruction threat.

Secondly, the concept of dissuasion poses the dangerous potential for creating an asymmetric arms race aimed at circumventing U.S. conventional military advantages. The rise of hard and deeply buried targets that present difficult if not impossible targeting

⁸² Various counter-denial and access strategies include using human shields, operating from urban environments, and maintaining decentralized tactics.

⁸³ See Robert Jervis, *Perception and Misperception in International Politics* (Princeton: Princeton University Press, 1976), 62-82. Jervis proposes a spiral model for understanding security dilemmas created from perceptions about adversary intentions.

problems for U.S. precision strike is a textbook example. Current estimates suggest there are already over 10,000 hard and deeply buried targets that both protect enemy value targets and deny U.S. intelligence, surveillance, and reconnaissance collection efforts. This has driven considerations to develop robust nuclear earth penetrator weapons as a means to counter this challenge. However such a move would bring with it controversial moral and legal implications regarding use of nuclear weapons that could exacerbate current WMD proliferation efforts. Lastly, perhaps the greatest challenge to dissuasion is summarized in the NSS itself. The risk that "individuals may gain access to means of destruction that until now could be wielded only by armies, fleets, and squadrons" makes the task so broad that success may be impossible.⁸⁴ Instead carefully balancing cost and benefit tradeoffs to achieve specific effects is the most advisable policy. In the near-term, developing capabilities to protect against asymmetric attacks is the priority but attempting to fight the last war often leaves military forces unprepared for the next one.

3. Deterrence

The use of "threats by one party to convince another party to refrain from initiating some course of action."⁸⁵

The concept of deterrence, categorized as a subset of coercion over 40 years ago by Thomas Schelling, has been a cornerstone of U.S defense policy since World War II. President Bush states in the 2002 NSS that "traditional concepts of deterrence will not work against a terrorist enemy whose avowed tactics are wanton destruction and the targeting of innocents."⁸⁶ The new nuclear triad introduced in the 2002 Nuclear Posture Review's intent was to bolster strategic deterrence by combining nuclear and conventional weapons into the same strategic pillar, while also emphasizing active defenses and a revitalized infrastructure as dissuasive elements.⁸⁷ However while the U.S. withholds the right to respond to weapons of mass destruction attacks with

⁸⁴ *The National Security Strategy of the United States of America*, 31.

⁸⁵ Paul K. Huth, "Deterrence and International Conflict: Empirical Findings and Theoretical Debates" *Annual Review of Political Science*, 2 (1999): 26.

⁸⁶ *The National Security Strategy of the United States of America*, 15.

"overwhelming force-including through resort to all of our options," conventional deterrence remains the coin of the realm today.⁸⁸

While it would be dangerously presumptuous to argue that war between states no longer poses a threat to the international environment, the greatest analytical shortfall in deterrence theory lies at the sub-state level. At this level, many of the realist assumptions regarding state primacy, security dilemmas, and rational actors become less relevant as uncontrolled borders and rogue individuals employing suicide tactics take center stage. In light of the catastrophic potential of these actors and the questionable nature of whether they can be deterred, the United States now considers the threat of preemption a pragmatic reality.

Deterrence functions to preserve the status quo by influencing potential adversaries not to take undesirable actions. Two key underlying premises are the assumption of a rational decision-maker and the ability to credibly impact an adversary's utility or cost-benefit calculations.⁸⁹ While true deterrent success is often difficult to measure because you cannot always discern another's intentions, it is generally accepted that deterrence often fails. Various contemporary scholars have systematically broken down deterrence and identified key variables impacting its success as a means for better understanding and implementing deterrence strategies. In particular, Lebow outlines communication, capability, commitment and resolve as important determiners of success while Huth presents empirical data emphasizing military balance, bargaining behavior, reputation, and interests at stake as causal factors.⁹⁰ What these theories point out is that success depends as much on perceptions as it does reality, and political leaders must

⁸⁷ Author's opinion is that this serves two purposes. First it represents an effort to bolster the relevance of the U.S. nuclear stockpile in the post Cold War era, and secondly it also seeks to bolster the credibility of U.S. strategic deterrence by holding the same targets hostage to conventional attack. For specifics on the new strategic triad, see "Nuclear Posture Review [Excerpts]" 8 January 2002, www.globalsecurity.org/wmd/library/policy/dod/npr.htm (accessed August 2004).

⁸⁸ *National Strategy to Combat Weapons of Mass Destruction*, 3.

⁸⁹ The use of game theory to derive empirical results is prominent today. See Steven M. Walt, "Rational Choice and Security Studies" *International Security* (1999): 5-48 for a critique of current formal methods beyond the scope of this research.

⁹⁰ See Richard Lebow, *Between Peace and War: The Nature of International Crisis* (Baltimore: The John Hopkins University Press, 1981), 84-9; and Huth, 25-46.

understand the various factors involved from both their and the adversary's point of view to effect the greatest chance of deterrent success.

Two major threat strategies for impacting an adversary's motivation and utility calculations include deterrence by denial and deterrence by threat of punishment. Deterrence by denial can be best understood as a counter force strategy. For example, the superior military capabilities of the United States can deny an adversary in the Persian Gulf any hope of military success because his forces will be vulnerable to U.S. attack and unable to penetrate U.S. defenses. On the other hand, deterrence through punishment represents a counter value strategy. In this strategy rather than focusing on denying the adversary's chances of military victory, a state threatens to make the costs of victory unacceptably high by threatening other items of value such as economic and civilian targets. Fundamentally, specific vulnerabilities of the target state play an important role in determining which strategy is most effective, efficient, and likely to succeed. Robert Pape argued in 1996 that deterrence by denial has become the most appropriate use of airpower because punishment strategies rarely ever work.⁹¹ However, his analysis has a state-centric focus and fails to adequately consider the effect of combined strategies against adversaries like al Qaeda. In the case of Iran, ballistic missiles and possible weapons of mass destruction effects can serve to deter possible U.S. aggression threatening both military and civilian targets.

Deterrent goals can be general or immediate in nature such as broadly deterring pursuit of nuclear weapons or specifically deterring the imminent invasion of a country. Both types of goals will vary in importance and be pursued through differing means, but immediate deterrence typically involves the use of more costly signaling measures and reducing any strategic ambiguity over commitment. For example, had the U.S. intelligence community better interpreted Iraqi military mobilization indicators in 1990, presumably a more aggressive immediate deterrence posture might have prevented the imminent Iraqi land grab in Kuwait. This example highlights another important deterrence distinction, the difference between direct and extended deterrence. The U.S. employs certain measures to deter attack against the U.S. homeland, but also attempts to

⁹¹ Pape, 10.

deter third party aggression against its allies. Cumulative, these factors and characteristics paint a complex political picture of competing demands and uncertain outcomes. Should deterrence fail, the United States must determine whether it is willing to pursue a new status quo by escalating to the full or limited use of force.

4. Coercive Diplomacy

The attempt to get a target—a state, a group (or groups) within a state, or a non-state actor—to change its objectionable behavior through either the threat to use force or the actual use of limited force.⁹²

Coercive diplomacy is a subset of the broader category of compellance, and unlike deterrence that seeks to keep an action from occurring through use of threats, its goal is to force a particular action. From a theoretical standpoint the line between it and compellance is often vague, but whereas compellance includes the full range of forcible actions to include war, coercive diplomacy only accepts the limited use of force for achieving political objectives. The U.S. military buildup in 1990-91 can be seen as a coercive attempt to convince Saddam to withdraw from Kuwait, however the execution of Operation DESERT STORM involved the dramatic use of force and greatly exceeded the bounds of coercive diplomacy.

In executing coercive diplomacy, Alexander George argues policy makers must decide: what are their demands, how can they create a sense of urgency, what sort of punishment to threaten, and whether to include positive inducements with the deal.⁹³ From here they have three basic graduated approaches they can pursue.

- **Ultimatum:** establishing an explicit or tacit requirement deadline that is backed up by credible threat.
- **Gradual turning of the screw:** threatening an incremental use of force over time to persuade the desired behavior.
- **Try-and-see:** weakest approach that avoids signaling urgency and strong threats for noncompliance.⁹⁴

⁹² Robert J. Art, "Introduction" in *The United States and Coercive Diplomacy*, eds. Robert J. Art and Patrick M. Cronin (Washington, D.C.: United States Institute of Peace Press, 2003), 6.

⁹³ Alexander George, "Coercive Diplomacy," in Robert J. Art and Kenneth N. Waltz, eds., *The Use of Force: Military Power and International Politics* (Lanham: Rowman & Littlefield Publishers, Inc., 2004), 72.

⁹⁴ *Ibid.*, 73.

Robert Pape argues that:

Success or failure is decided by the target state's decision calculus with regard to costs and benefits...When the benefits that would be lost by concessions and the probability of attaining these benefits by continued resistance are exceeded by the costs of resistance and the probability of suffering these costs, the target concedes.⁹⁵

In 1990-91, the United States presented Saddam the ultimatum to unconditionally withdraw from Kuwait or face war. This ultimatum failed to achieve the stated objectives and resulted in the United States and its allies launching major combat operations on January 16, 1991. Whether Saddam would have withdrawn if allowed to take his military equipment with him will never be known for sure, but he clearly viewed the requirement to abandon this equipment as part of his withdrawal as less desirable than risking war. Later in 1994, Saddam again threaten its neighbors to the south by deploying 50,000 troops near the Kuwaiti border. The United States countered with its own deployment of several thousand troops and the threat to further deploy hundreds of aircraft. This time U.S. policy both deterred Iraqi aggression and coerced with withdrawal of the troops from the border area.⁹⁶ As for the current threat posed by Iran and its alleged nuclear weapons program, the United States has officially stated that it does not intend to use force to resolve the issue, but it has made strong verbal statements, employed economic sanctions, and maintained a regional military presence that all serve to influence Iranian decision-making. These efforts are intended to convince Iran to abandon its nuclear efforts due to the extreme costs.

Two key assumptions underwrite the basic theory of coercive diplomacy. First, the coercing party must be able to generate credible and potent threats to targets valued by the adversary. Secondly, the bargaining framework maintains the assumption of rational actor decision making processes. Recent operations have shown that the United States clearly has the ability to generate and deliver devastating military power.

⁹⁵ Pape, *Bombing to Win*, 15-16.

⁹⁶ The U.S. response, Operation VIGILANT WARRIOR, resulted in Iraq quickly withdrawing its forces. Whether just testing American response or forced to reconsider the costs and benefits of its actions, Iraq was forced to publicly reverse its behavior. See John B. Alterman, "Coercive Diplomacy Against Iraq, 1990-1998" in *The United States and Coercive Diplomacy* eds. Robert J. Art and Patrick M. Cronin (Washington, D.C., United States Institute of Peace Press, 2003), 286.

However, adversaries also recognize the role of domestic and international constraints on the use of force. Domestically, U.S. presidents are accountable to Congress and the electorate should they desire to commit military forces, and Congress ultimately maintains power of the purse for funding such operations. As for rationality, many contend that deterrence and coercion were problematic with respect to Iraq because Saddam was not a rational actor. The same is currently being said today for the religious and ethnic extremists who appear clearer in what they are against than what they are for. With different cultural roots, limited personal accountability, and a lack of institutional checks and balances to affect the behavior of these rogue individuals, their view of rationality can be quite different than that of U.S. decision-makers.

Robert Art assesses the historical cases of coercive diplomacy since 1990 and concludes that on average it only succeeds one of every three tries. Whether these statistics should be interpreted as an overall success or failure remains up for debate, but what is certain is that any successful case of coercive diplomacy has strategic value and can offer valuable implications for future policy. From his analysis, Art concludes the following lessons learned.⁹⁷

- It is difficult to estimate chance of success in any specific case
- Multiple coercers and multiple targets make the problem more difficult
- Military superiority does not guarantee success
- Positive inducements offered after the threat or use of force increase the chances of success
- Demonstrative denial is more effective than limited punishment
- Never commit to coercive diplomacy unless you are willing to risk war or maintain an acceptable exit strategy if it fails

These suggest the United States will continue to face challenges that cannot be solved peacefully despite its military superiority. They also point to the difficulty arising from the complexity of emerging threats today. Coercive diplomacy will continue to be an integral part of the global war on terror and individual policies and actions must be carefully analyzed to capture the real lessons learned.

⁹⁷ Robert J. Art, "Coercive Diplomacy: What Do We Know," in Art and Cronin, eds., *The United States and Coercive Diplomacy* (Washington, D.C.: United States Institute of Peace Press, 2003), 361-410.

G. SUMMARY

The United States accepts the view that the future international security environment will be plagued by strategic uncertainty. Although integration to extend the benefits of peace, freedom, and prosperity to a greater global audience is a key theme in the current Bush doctrine, deterrence and coercion remain equally important for dealing with the rising threat of indiscriminate violence and extremist agendas. In this environment, the threat and actual use of force stand as the ultimate arbiter. Thus, recent U.S. operations in the Middle East have played an important role in re-establishing order and stability in a new era of anarchy characterized more by sub-state actors and catastrophic weapons than great power war.

To address the perceived disconnect between a legacy U.S. military posture and the demands posed by the current threat environment, the Department of Defense's new force structure paradigm relies more on agile, expeditionary forces operating from and across a web of forward bases than its Cold War predecessor. These forces will be poised with the capability to respond to a variety of threats across the globe in a compressed timeframe. The goal of these changes is to preserve the peace by better achieving the national goals of assurance, dissuasion, deterrence, and coercion. However, these are based on certain minimum assumptions regarding rational actors and the ability to influence their decision-making processes that are less applicable to terrorist groups than states. This drives the need to better understand these groups and discern useful influence mechanisms that are politically acceptable.

IV. OPERATIONALIZING AIRPOWER IN THE PERISAN GULF

A. INTRODUCTION

This chapter closes the seams to understanding the future role of airpower in the Gulf security framework by assessing the intersection of airpower capabilities, U.S. strategic objectives and Gulf challenges. The analysis is logically organized around USCENTCOM's four broad military missions. As dictated by the new global force posture construct and verified by ongoing public statements, the U.S. military will rely on fewer forward-deployed military forces to secure regional objectives. Nonetheless, the Air Force will continue to play an important role in the Gulf security framework from both an over-the-horizon and a forward-presence standpoint. Airpower's precision, global mobility and strike, and network centric operations make it particularly valuable for defeating a wide range of adversaries. Forward-deployed forces further contribute to building regional military capabilities through military exercises and training. They also play a vital role in supporting allies and combating terrorism through information enabling command, control, computer, communications, intelligence, surveillance, and reconnaissance (C4ISR) operations and providing an important coercive deterrent. As a new security framework is implemented, maintaining suitable operational access in the region remains an important but threatened requirement.

Under the new global posture construct, future U.S. forward presence in the Gulf will shift from the 'ever present' posture of the 1990's to one increasingly characterized by "enduring access, episodic employment."⁹⁸ No longer facing the threat posed by the Iraqi military machine, the capabilities needed to effect U.S. policy goals take on a different face today. To minimize negative sentiment and mitigate vulnerability to further terrorist attacks, U.S. deployments will be less predictable and aimed at building host nation capacities while also denying sanctuaries and safe havens for terrorist groups. To support these objectives and provide strategic overwatch to identify emerging problems, the

⁹⁸ Joint Chiefs of Staff strategic planner quoted in Michael Knight, "Regional Security Issues" *Janes Intelligence Review* (May 2005).

demand for Air Force C4ISR operations will be insatiable and continue to stress certain low density-high demand capabilities.⁹⁹

1. USCENTCOM

U.S. Central Command (USCENTCOM) is the geographic unified command responsible for the Persian Gulf region. General John Abizaid outlines the command's mission as to "defeat adversaries, promote regional security and stability, support our allies and friends, and protect vital U.S. interests."¹⁰⁰ From these a host of specific goals, tasks and supporting missions contribute to the overall warfighting, engagement and development strategy in place.¹⁰¹ While military operations in Iraq and Afghanistan garner the most attention, the U.S. role in building regional military capability continues to also be important. Following the 1991 Persian Gulf War, the United States renewed and/or formalized important bilateral defense agreements with all GCC states except Saudi Arabia.¹⁰² As America's "special relationship" with the Kingdom suffered under the strain of a decade of military operations containing Iraq and the subsequent fallout from its 9/11 terrorist links, these defense agreements became important to continued U.S. military operations. When America was no longer able to negotiate suitable operational freedom, enhanced arrangements with the Gulf states of Qatar, Bahrain, and the UAE provided necessary alternative basing rights to compliment those already provided by Kuwait.¹⁰³ Furthermore, these countries enable the critical pre-positioning of supplies needed to support rapidly responsive expeditionary operations given the lack of any permanent main operating bases.

⁹⁹ The term strategic overwatch suggests the ability to sufficiently monitor changing security conditions and identify potential crises with sufficient forewarning.

¹⁰⁰ John P. Abizaid, "United States Central Command Posture for 200," Statement before the Senate Armed Services Committee. (1 March 2005), 5. www.defenselink.mil/dodgc/old/docs/test5-03-02Abizaid.doc (accessed April 2005).

¹⁰¹ United States Central Command, *USCENTCOM Strategy Statement*. www.centcom.mil/aboutus/strategy.htm (accessed February 2005).

¹⁰² See Katzman, 18. The agreements do not formally require the United States to come to individual states defense nor do they provide U.S. forces automatic permission to use Gulf facilities for military operations.

¹⁰³ The U.S. has had a long-standing naval presence with 5th Fleet headquartered in Bahrain, but the build up of U.S. warplanes in Qatar and establishment of the new Combined Air Operations Cell (CAOC) at Al Udeid Air Base is a recent phenomena. Likewise, over the past several years, the United Arab Emirates has played an increasingly important role as regional hub for (C4ISR) assets operating out of Al Dahfra Air Base.

2. Airpower's Role

We provide the persistent intelligence and communications networks that deliver precision-quality information to the joint force commander; we provide global mobility in the airlift and tanker forces that move people and equipment anywhere on the planet; and we provide rapid strike by employing an umbrella of kinetic and non-kinetic strike capabilities to deliver precise, tailored effects.¹⁰⁴

This statement comes directly from the 2005 Air Force Posture Statement and highlights the importance of thinking about airpower both in coercive and enabling terms. While gaining and maintaining air superiority remains a fundamental prerequisite for follow-on missions, the ability to find, fix, track, target, engage and assess (F2T2EA) the right targets at the right time (a key leveraging capability in an era of asymmetric and often fleeting adversary targets).¹⁰⁵ Similarly airpower has transitioned from a target and platform paradigm to an information and effects one. Ralph Peters eloquently argues that the U.S. ability to process and share information across the battlespace has become a force multiplier so powerful that it cannot even be measured.¹⁰⁶ In fact, the ability to process knowledge, synchronize forces, and synergize effects has driven Air Force leadership towards viewing the Combined Air Operations Cell (CAOC) as a weapon system of its own.¹⁰⁷ Thus it becomes important to think of airpower in terms of both a kinetic role that achieves physical and psychological effects through action and a non-kinetic role that focuses on gathering, processing, and employing information and intelligence to achieve the right effects at an overmatching pace.

The air expeditionary force (AEF) construct provides the organizational model whereby preplanned capabilities-based packages are continuously on call to provide 48-hour response for commanders. If one accepts the proposition that the global war on terror is an enduring campaign and the Persian Gulf is at the geo-strategic epicenter of it,

¹⁰⁴ John P. Jumper and Peter B. Teets, *U.S. Air Force Posture Statement 2005* (Washington, D.C., 2005), 7.

¹⁰⁵ In the decade since Operation DESERT STORM, the Air Force has dramatically decreased the targeting kill chain (F2T2EA) from a system operating on a 72 hour cycle to one that was near real time in Operation IRAQI FREEDOM. This has significantly enhanced U.S. ability to hold fleeting targets at risk.

¹⁰⁶ Peters, 66-74.

¹⁰⁷ The idea that a headquarters staff function is so essential to the overall success of the fight through its role in optimizing tactical airpower to achieve strategic effects is a monumental conceptual shift.

then the growing demand for and importance of C4ISR capabilities will not fade. This has important implications for USCENTCOM who only has rotational access to these capabilities. As the capabilities become more integral in steady-state demands, they become too valuable to be tied to a limited number of ground based platforms. The Air Force will likely have to shift the capabilities to space or near space where greater persistence and geographical coverage can be maintained or invest in more traditional platforms.

B. USCENTCOM MISSION - DEFEAT ADVERSARIES

USCENTCOM faces a variety of potential state and sub-state adversaries that can threaten U.S. and allied interests in its area of responsibility. Currently, terrorism and weapons of mass destruction pose the most immediate threat. While the Iraqi insurgency holds the media spotlight, the reality is that terrorist threats are operating across the Persian Gulf. As the United States continues the war on terrorism, efforts will continue to emphasize defeating terrorist cells and destroying their networks, but long-term success hinges on eliminating the underlying social and economic conditions sustaining the problem. Another major threat to Gulf Security is the possibility of inter-regional aggression, and the worst case scenario would involve a hostile move by the Islamic Republic of Iran.¹⁰⁸ In such a case, the full brunt of airpower could and would be brought to bear, but the important steady state question from a preventative standpoint involves quantifying sufficient force to deter such an act and also be capable of initial action mission requirements. Air Force concepts of operation (CONOPS) provide the basis for answering this question as they serve a "very specific purpose: clearly convey how air and space power capabilities should be used as instruments of national power."¹⁰⁹

Given that USCENTCOM's future forward military presence "is premised on a minimized footprint...[and] the need to have most of our forward deployed posture oriented toward assisting the local forces in the region, so they can be the main agents to

¹⁰⁸ USCENTCOM faces other threats in its area of responsibility that U.S. forces and resources stationed in the Gulf must be prepared for.

¹⁰⁹ See Headquarters United States Air Force, *Air Force Transformation Flight Plan* (Washington, D.C.: Future Concepts and Transformation Division, 2004), 42. CONOPS link strategy to programs by determining what capabilities will be need to meet future missions. See also Appendix 1 for a complete list of Air Force CONOPS and associated definitions.

secure regional peace," Air Force global strike, global mobility, and global persistent attack capabilities become primary over-the-horizon underwriters of this plan.¹¹⁰ While many still question the limits of airpower, former Assistant Secretary of State Richard Holbrooke's remarked following Operation DELIBERATE FORCE that "one of the great things that people should have learned from this is that there are times when air power--not backed up by ground troops--can make a difference."¹¹¹ Three particular developments have been central to the revolutionary change in capabilities airpower now offers: precision and stealth, global reach and strike, and network centric operations.

1. Precision and Stealth

"Precision weapons have redefined the meaning of mass" and changed targeting thought from 'aircraft needed per target' to 'targets per aircraft'.¹¹² Whereas squadrons attacked a target area in World War II and aircraft flights attacked a target in Vietnam, today individual aircraft can attack multiple targets per sortie with significantly higher accuracy. The key enabler has been the advent of laser and global positioning system (GPS) guided precision munitions. Together they enable U.S. aircraft to attack stationary targets under any conditions and mobile targets anytime target line of sight is available. Precision munitions also offer decision-makers increased confidence in mission success while minimizing collateral damage. It is this capability that allows strategists to think in terms of target effects rather than simply target destruction as a measure of effectiveness and efficiency. When the current Air Force Vision was written in 2000, it touted an AEF package's ability to hit 200 targets per day. With GPS guided munitions delivery capability operational across the bomber force today, the real number is significantly higher. In fact, the challenge is not being able to attack enough targets but instead identifying enough suitable targets and limiting effects to minimize counterproductive impacts on post conflict operations.

¹¹⁰ Abizaid, 44-45.

¹¹¹ Quoted in Richard P. Halion, "Precision Weapons, Power Projection, and The Revolution in Military Affairs" *USAF Air Armament Summit* (26 May 1999), <https://www.airforcehistory.hq.af.mil/EARS/Halionpapers/precisionweaponspower.htm> (accessed April 2005).

¹¹² Statement by Colonel Phillip Meilinger, former commander of the Air Force School of Advanced Air and Space Studies quoted in Richard P. Halion "Precision Weapons, Power Projection, and the Revolution in Military Affairs."

When combined with stealth, precision significantly enhances U.S. credibility to hold anti-access targets at risk as well as decreasing overall cost and mass requirements. Whereas a non-stealth strike mission into contested airspace requires an entire package of supporting aircraft; stealth reduces this requirement to single aircraft that in the case of a B-2 can strike 16 independent targets at once. With the addition of the F/A-22 Raptor, the Air Force further expands the day and night attack freedom available against even the most formidable surface-to-air or air-to-air threats. Although President Bush stated the United States has no intention of using force against Iran at this juncture, there is little doubt that American forces could inflict awesome damage on the Islamic republic and its nuclear program. However, any such attack is unlikely because it would be linked to negative higher order effects such as inciting Iranian nationalism and fueling increased terrorist attacks against the United States. The end result or outcome might delay the countries program for several years, but the overall costs could be enormous.

2. Global Reach and Strike

U.S. strategic deterrence is significantly enhanced by the ability to forcibly enter contested airspace and hold targets at risk across the globe. The Air Force highlighted the extent of this capability in the Gulf War when B-52 aircraft set an aerial warfare record with a non-stop 35-hour combat mission from Barksdale Air Force Base, LA to Iraq and back. B-2 Spirit aircraft later accomplished similar missions in the Balkans and Middle East while also adding the additional advantage of stealth. In situations where more robust and persistent airpower is needed, the Air Force stands ready with two aerospace expeditionary force packages that can be rapidly deployed forward. These AEFs provide "joint force commanders with ready and complete aerospace force packages that can be tailored to meet the spectrum of contingencies."¹¹³ This provides significant deterrent effects by removing the perception that forces must be stationed in close proximity to be of immediate value. However, there can be little doubt that the 2003 Central Intelligence Agency use of an armed Predator UAV to target a terrorist

¹¹³ Michael E. Ryan and F. Whitten Peters, *America's Air Force Vision 2020* (Washington, D.C., 2000), 5.

truck in Yemen sent an important message to any would be adversary that there is no safe haven from U.S. airpower.¹¹⁴

3. Network Centric Operations (NCO)

The synergistic combat capability achieved through the horizontal and vertical integration of Air Force sensors, shooters, and command and control left an indelible mark on the battlefield in Iraq and Afghanistan. Linking real-time targeting information between collectors, processors, and end users dramatically improved the ability to identify and engage fleeting targets. Furthermore, the effective mating of network technology and precision weapons to legacy airframes like the B-52 completely redefined legacy role boundaries for certain platforms.¹¹⁵ This was especially important in Afghanistan where the lack of access to close-in basing stretched the endurance and sortie generation rates for tactical aircraft operating from the Gulf and increased the demand for more robust capabilities from higher endurance platforms.¹¹⁶

To successfully fight the ongoing war on terrorism, further improvements in urban targeting and close air support are needed to keep pace with the threat. This statement is not meant to devalue airpower's current role but instead to underscore the implication of an adaptive adversary and the need to control the momentum and limit negative collateral damage effects. To do so means improving image transfer capabilities between sensors and shooters, continued fielding of improved targeting pods for strike aircraft, and addressing the growing importance of ISR assets in supporting both air and ground troops. Persistent real time reconnaissance and surveillance is invaluable to kill and capture operations against high value targets as well as efforts to extend greater control over ungoverned territories and borders. Synthesizing useful information and knowledge from the vast supply of raw data available in a timely manner makes programs such as the Network Centric Collaborative Targeting important future

¹¹⁴ Top al-Qaeda operative Qaed Salim Sinan al-Harethi was killed by a Predator hellfire missile attack on his vehicle. See "U.S. Kills al-Qaeda Suspects in Yemen" *Associated Press* 5 November 2002, www.usatoday.com/news/world/2002-11-04-yemen-explosion_x.htm (accessed February 2005).

¹¹⁵ In Afghanistan, B-52 bombers accomplished tactical close air support missions, further emphasizing the Air Force shift from platforms to effects.

¹¹⁶ Long sortie duration significantly decreases overall sortie generation capabilities and efficiency due to excessive transit times to and from the battlespace.

concepts.¹¹⁷ The amount of available data is so vast that improving the ability to collect the right data becomes increasingly important. Considering that in the first Gulf War, U.S. military computers were rapidly proliferating but not networked, the degree of networked operations today is impressive. For example, the joint air tasking order flows virtually real-time today, whereas it operated on a 72-hour cycle and had to be flown out to naval carriers during Operation DESERT STORM.¹¹⁸

C. USCENTCOM MISSION- PROMOTE REGIONAL STABILITY

Persian Gulf relations are often guided more by shared interests than shared values. Promoting regional stability is a two-track problem that must address not only inter-state instability but also intra-state instability. The desired effect being to decrease the risk of and vulnerability to aggression by strengthening regional interdependence. This involves improving and enhancing alliances, conducting joint exercises and training, and using other formal and informal efforts to build relationships. USCENTCOM's ultimate goal being to create the "balance of power that favors freedom" articulated in the NSS.¹¹⁹ Airpower will continue to contribute to this through ongoing military exercises, periodic forward deployments, and support of the new Gulf Air Warfare Center established in Abu Dhabi, UAE.

GCC militaries operate a mixture of American, British, and French hardware systems making joint and coalition interoperability difficult at best. Operation DESERT STORM highlighted these difficulties, and the differences have only grown as the technology gap between U.S. and allied weapon systems grow. Exercise BRIGHT STAR, founded in 1980, is USCENTCOM's primary venue to enhance regional military cooperation, training, and readiness. Occurring every two years, the exercise involves over 70,000 air, ground, and naval forces from more than 10 countries.¹²⁰ In addition to

¹¹⁷ NCCT allows horizontal machine-to-machine dialogue between sensors without human intervention. It will enable real-time adaptive sensor management and significantly improve high value target detection and identification. See Barb Carlson, "Network Sensors Aid Targeting" *Military Aerospace Technology* (01 December 2004), <http://afeo.langley.af.mil/> (accessed December 2004).

¹¹⁸ Francona, 104.

¹¹⁹ *The National Security Strategy of the United States of America*, 29.

¹²⁰ The U.S. military did not participate in BRIGHT STAR 03 due to ongoing missions in Afghanistan and Iraq. BRIGHT STAR information obtained from www.globalsecurity.org/military/ops/bright-star.htm (accessed April 2005).

BRIGHT STAR, a new Air Force specific flight training center just became operational. According to Peter Rodman, the Assistant Secretary of Defense for International Security Affairs, the new Gulf Air Warfare Center at Al-Dhafra Air Base will support the training of Emirate pilots in their newly purchased Block 60 F-16 aircraft as well as "serve air force pilots from across the Gulf."¹²¹ He further stated "it's something we hope a lot of the Gulf countries will benefit from. A lot of outside countries are involved (in training pilots), including the United States."¹²² Given the strategic fallout with Saudi Arabia, where the Air Force also had a pilot training mission, this new center will provide an important future venue for bolstering the GCC's airpower deterrent as well as promoting relationship building.

D. USCENTCOM MISSION- SUPPORT OUR ALLIES AND FRIENDS

Theater cooperative security agreements play an important role in formalizing cooperation and coordination between the United States and its Gulf allies. Although, naval airpower offers the greatest opportunity to minimize the domestic strain posed by regional military presence, it is also limited by carrier availability and resupply needs. Airpower offers the useful advantage of not being perceived as an occupying force as well as not imposing as large of a footprint as ground forces do. The difference between an air expeditionary wing deploying to the Gulf region and an Army brigade doing the same is definitely a factor as is the thought of employing these forces in combat operations. The extent of negative sentiment surrounding airpower strikes in Iraq during the 90s pale in comparison to the reactions has ground forces been used. Today the idea of using forces "tailored for effective but not overbearing assistance" further attempts to minimize negative anti-Western sentiment.¹²³ In terms of boosting regional domestic counter-terrorism capabilities, the combat aviation advisory squadron program is one of the important assistance programs.

¹²¹ Lydia Georgi, "U.S. Seeks to Formalize Military Links with UAE" *Agence France-Presse, Abu Dhabi* (12 Jan 2005), www.defensenews.com/story.php?F=595844&C=americ (accessed April 2005).

¹²² Ibid.

¹²³ Abizaid, 9.

Improving state-level counter terrorism capabilities is integral to long-term regional stability. To support this, airpower can provide valuable sensor data and intelligence to regional governments to help locate, track, and target rogue groups. Airpower can also provide precision strike capabilities to facilitate fleeting target operations. The Air Force AEF cycle provides for two on call AEF packages to be available for 120-day deployment at all times. Given that USCENTCOM has no permanently assigned forces, daily demand for Air Force sensor and control platforms such as the E-3 Sentry, Predator, Global Hawk, E-8 Joint Stars, and others will require higher deployment rates than for strike or air superiority platforms. This has long-term readiness, operations tempo, and personnel tempo implications for the affected high demand assets. Furthermore, if these units are routinely supporting a steady state requirement in the Gulf, then they will not be available to support other contingencies, thereby impacting overall EAF flexibility.

The recent U.S. Special Operations Command concept of a combat aviation advisory squadron also holds great merit for coordinating with regional militaries and governments.¹²⁴ Improving indigenous expertise and capabilities allows greater effectiveness without increasing the operational burden carried by U.S. forces. Maintaining low U.S. visibility also helps strengthen domestic government legitimacy and control. However, cultural and institutional barriers will continue to limit overall regional military effectiveness. Understanding the Gulf monarchies need to balance the benefits of a strong military against the risk of a strong military conducting a coup offers an understanding as to why.

E. USCENTCOM MISSION- PROTECT VITAL US INTERESTS

Although last published in 1995, the United States Security Strategy for the Middle East states "our paramount national security interest in the Middle East is maintaining the unhindered flow of oil from the Persian Gulf to world markets at stable prices."¹²⁵ Today, combating terrorism and the proliferation of weapons of mass destruction are also vital interests. As such, they require the ability to project sufficient

¹²⁴ "Combat Aviation Advisors play a major forward presence and engagement role by shpaing foreign aviation forces capabilities to develop their own internal defense capabilities." See Headquarters United States Air Force, *The U.S. Air Force Transformation Flight Plan 2004*, 32-33.

¹²⁵*The United States Security Strategy for the Middle East*, 6.

power to effectively influence potential adversaries. However, as the war on terror has shown, U.S. efforts to influence Iraq through persistent coercive military force also had the unintended effect of "catalyzing sympathy for terrorist movements acting in the name of Islam and the Arab nation."¹²⁶ The new defense strategy emphasis on redefining capabilities has important implications for the future U.S. military presence. The new construct depends heavily on the ability to anticipate possible problems and surge forces forward to meet the challenges before they escalate. This requires access to pre-positioned supplies and suitable forward operating areas. This access must be understood both in physical and political terms and also includes the need to deny enemy anti-access strategies such as threats of WMD use or political coercion of host governments. Given that U.S. basing access in the region only occurred in response to Iraqi aggression in 1990, it is dangerous to view current basing access as a given.

1. Operational Access Defined

Access to conduct the necessary range of military operations for a particular mission at an acceptable level of risk underlies U.S. policy assumptions. The Department of Defense is currently developing a joint integrating concept to address the need for gaining, maintaining, and defending operational access. In the broadest sense, operational access involves possessing the ability to employ national instruments of power in pursuit of desired goals and interests. For the purposes of this analysis regarding airpower, operational access (OA) will be defined as physical and political access to the aggregate resources and rights necessary to conduct the desired range of aerospace operations in support of joint military and national objectives at an acceptable level of risk. By definition, then it is not a static requirement but instead a dynamic one. In the Persian Gulf, U.S. military presence operates on limited rather than permanent access assumptions and requirements, which makes it more tenuous than desired.

2. Access Dimensions

The physical and political dimensions of OA are each unique but at the same time intertwined. The physical dimension includes not only the bases and resources necessary to support steady-state operations but also the ability to ensure the continued and if needed expanded ability to both operate and defend operations. This involves

¹²⁶ McMillan, 11.

considerations such as suitable runway lengths, maintenance facilities, parking and cargo ramp space and hardening, runway approach guidance equipment and security, and airfield protection. Likewise it involves the ability to bed down forces and conduct operations at an acceptable tempo. U.S. security assurances prior to the first Gulf War in 1991 were premised on access to Saudi basing infrastructure should the U.S. military be needed. From the Saudi perspective, the operation was a resounding success of this concept as U.S. forces poured in, set up operations, and subsequently defeated Iraq. After seeing the implications of allowing the U.S. military to freely position itself for attack, it would be foolish to think that Iran or another likely adversary would make the same mistake in the future.

The other important dimension to operational access involves securing and maintaining political support for not only a forward presence but also the ability to conduct desired missions from those bases. As outlined in the strategy documents and recent statements, developing diplomatic relations that include U.S. military access to host nation facilities is a major emphasis item today. Bilateral security agreements are a key component to developing these arrangements. During the 1990's, the U.S. and Saudi governments invested heavily in airfield infrastructure as the USAF transitioned from a 'tent city' operation at Prince Sultan Air Base to one with improved permanent facilities. However despite enjoying sufficient physical facilities, U.S. freedom of action was becoming unusable as internal groups placed greater pressure on the House of Saud. This precipitated the USG pursuing options with Qatar to move its fighter operation and combined air operations center to Al-Udeid Air Base. At the same time, USAF C4ISR aircraft operations shifted to Al Dhafra Air Base, UAE. Meanwhile, the Air Force continued to use additional bases in Kuwait, Bahrain, and Oman to support Iraqi containment missions. At the height of operations during Operation ENDURING FREEDOM (OEF) and OIF, the USAF was operating from 36 bases in and around the region and is still actively present at 14 today.¹²⁷

¹²⁷ John P. Jumper, "Toward New Air and Space Horizons" Remarks to the 2005 Air Force Association Air Warfare Symposium (18 February 2005) www.af.mil/speech/speech.asp?speechID=96 (accessed March 2005).

As the unexpected failure to secure staging and transition rights in Turkey for a northern ground force supporting Operation IRAQI FREEDOM demonstrated, political access cannot be assumed. In particular this example disconfirmed the perception that while political access can be difficult; the United States will be able to secure it when it matters. While the lack of a northern push is not the root cause for the ongoing Iraqi insurgency, it still had important implications on the campaign. For the Air Force, over-flight access to the battlespace poses a similar problem but again is often easier to obtain than permission to stage ground forces. Although Gulf governments did not support the U.S. invasion of Iraq, Qatar and the UAE proved significantly more accommodating than Saudi Arabia had been. The following table data illustrates the significant effort and investments in U.S. basing options in the Gulf region over the past several years.

Table 3. USCENTCOM Military Construction Funding Trends¹²⁸

Airfield / Location	FY2001-04 Funds	FY2005 Fund Request	Total	Major Projects
Afghanistan				
Bagram Airfield	86.1	142.1	228.2	Infrastructure, helo ramps, fuel storage, power generation
Khandahar Airfield	0	16.0	16.0	Ammo supply point
Iraq				
Balad Air Base, Baghdad	111.8	57.1	168.8	Airfield lighting, ramp construction, cargo pads
Talil Air Base	0	10.8	10.8	Billeting
Kuwait				
Ali ala Salem Air Base	0	75.5	75.5	Aerial Port Facility
Al Jaber	2.9	0	2.9	
Qatar				
Al Udeid Air Base	199.6	0	199.6	Relocate Headquarters from Saudi Arabia
Al Sayliyah	36.5	0	36.5	Same as above
United Arab Emirates				
Al Dhafra	79.6	67.4	147.3	Consolidate ISR force structure

¹²⁸ Data compiled from: U.S. Department of Defense, *FY2005 Supplemental Request for Operation Iraqi Freedom (OIF), Operation Enduring Freedom (OEF), and Operation Unified Assistance* (February 2005), www.dod.mil/comptroller/defbvudget/fy2006/fy2005_supp.pdf (accessed April 2005); and Amy Belasco and Daniel Else, *Military Construction in Support of Afghanistan and Iraq* (Washington, D.C.: Congressional Research Service, 11 April 2005).

Of the \$1.02 billion supplemental request for USCENTCOM priority issues, \$301 million was allocated to directly support Air Force construction projects. Specifically, airfield construction consumed \$252 million of the requested funds while billeting, planning, and munitions shortfalls accounted for the remainder.¹²⁹ Collectively, the supplemental funds serve to increase the functionality of the primary Air Force FOS and CSL locations in the region. They also have the added benefit of improving host nation military capabilities because of their dual-use nature. Lastly though what is not shown in this data that is also important is the significant financial support host nation GCC countries have provided since 1990 that have been critical to sustaining U.S. operations in the theater.

3. Threats to Access

Potential adversaries have a wide range of measures available to disrupt and deny U.S. goals. In cases where the USAF currently has forward operating bases and infrastructure, adversaries can attempt to raise the cost of protecting these by threat or use of offensive weapons such as chemical or biological attacks on regional airbases, ballistic missile attacks, and small arms fire attacks on vulnerable launching and recovering aircraft. Furthermore adversaries can attack the U.S. logistical trail as another method to chip away at U.S. resolve and decrease combat efficiency. Adversaries can also target host nation governments and populations with informational, ideological, or physical efforts aimed at reducing public and governmental support for U.S. operations. While they may not be able to force the expulsion of American forces, they may be able degrade American efforts by raising the cost of operations. An overbearing U.S. military presence can become self-defeating by eroding political support if the regional governments do not share the same threat perception as the United States does. Such a loss would place even greater responsibility on global strike and mobility capabilities and also raise the costs of maintaining persistence air operations.¹³⁰

Robust joint military capabilities are an important counter to the threat of lost operational access. Depending on the mission requirements, capability thresholds can be

¹²⁹ U.S. Department of Defense, *FY2005 Supplemental Request*, 58.

¹³⁰ The term cost is used to include both number of strike aircraft needed to maintain theater sortie counts due to inability to maximize aircraft turnaround times and total sorties per day and the possible need to forcibly establish new access points.

met by various joint or individual service packages. With greater independence from land based requirements, the US Navy has built-in forward basing access, but still faces limits posed by logistical re-supply requirements, aircraft ranges, and political over-flight rights. Another important requirement is the ability to forcibly establish new operational points closer to the battlespace, especially if the USG lacks functional nearby access. To this end, it will be important to capture the lessons learned from special forces units that successfully conducted airfield take down operations in Iraq.

F. PROVING THE MODEL AND FUTURE CONCERNS

1. EBO Methodology- A Second Cut

Effects based methodology offers a meaningful way for thinking in systems terms that capture the importance of integrating effects as strategy is formulated. The model presented earlier in Figure 1 applies both to broad strategy formulation and also to the process of implementing the supporting sub-strategies. Then as operations are executed, actions and effects must be analyzed at each of these levels simultaneously to achieve the high degrees of efficiency and effectiveness sought. Today, great power war and decisive battles are less prevalent and have been replaced by surgical attacks with limited objectives. While the U.S. military may not prefer such operations or the political constraints that accompany them, it has become an operational reality. The ongoing operations in Iraq provide an excellent case study for examining the changing nature of airpower employment as awareness of broader systemic effects shape strategy. The November 2004 attack on Fallujah is particularly beneficial as it involved limited objectives, collateral damage concerns, and urban targeting challenges.

Unlike the first Gulf War in 1991 that focused massive airstrikes to cripple the Iraqi leadership, military, and overall warfighting potential, recent operations have involved a completely different set of assumptions regarding acceptable and even desirable levels of target destruction. While many of the details surround current operations remain classified, general observations sufficiently demonstrate the key EBO principles presented here. The desired outcome in Fallujah essentially mirrored overall objectives in Iraq: defeat of the insurgents, establishment of increased stability and security, and transition of control to Iraqi forces. The growing insurgent presence and resulting terrorist operations flowing from the city, demanded a strategic shift to counter

the insurgent advantages. To minimize the negative effects that indiscriminate attacks on the city could have, actions had to be carefully planned and balanced. Important effects included destroying current insurgents operating in the city, reducing future insurgent abilities to operate in Fallujah, minimizing impact on local citizenry, and affecting the broader decision-making calculus of insurgents across Iraq. For airpower, this drove specific considerations and mission support requirements that until now were unthinkable. While bombing can still be strategic, the goal was not leveling the city but selectively picking off the individuals haunting it.

Even before the major assault on the city, airpower was carefully being used to identify and target suspected insurgents in the city. Cognizant of collateral damage effects on civilian support for the insurgents, attacks were orchestrated with extreme care. In one particular case, crews were able to target a weapons carrying vehicle by employing a hellfire missile that flew over a house and under a carport to hit the vehicle without sustaining damage to the house structure.¹³¹ As preparations for the major assault began, the nature of airpower demands shifted as persistent ISR became tantamount to effective insurgent identification and tracking. Whereas strike sorties outnumber ISR sorties 12-to-1 during OIF major combat operations, they only outnumbered ISR sorties 2-to-1 during the Fallujah campaign.¹³²

As the operation unfolded, planners remained aware of the post attack implications. Significant efforts were made to limit damage but the inherent nature of urban operations and the willingness for Iraqi insurgents to use cultural shields such as religious buildings and hospitals for protection limited overall results. Furthermore, since civilians were given advance warning to depart the area for safety, the insurgents were also afforded the same opportunity. It should have been no surprise to American decision-makers that the insurgents would elect to avoid a disadvantageous fight in Fallujah for a better one at a later date as they also departed in significant numbers. Despite the unprecedented tactical execution and integration of joint military capabilities, when the operations ended a considerable amount of damage had been imparted on the city and its citizens. Overall the attack was a success but still contributed to broader

¹³¹ Rebecca Grant, "The Fallujah Model" *Air Force Magazine*, 88, 2 (February 2005), 51.

¹³² *Ibid.*, 52-3.

negative effects as insurgents fled the city before the attack and then used it to support their information war against the United States.

Today, the Fallujah campaign can also be interpreted as a mismatch between American military capabilities and the target environment that resulted in excessive damage to the actual city and its residents. While it was a victory for U.S. and Iraqi forces, it was also simply a battle in a larger war whose overall results remain uncertain. Although the U.S. was able to dictate the timing and tempo of the attack, war is uncertain and not all effects can be anticipated. Ensuring that each military member understands how his or her actions support or detract from the overall mission will be important to optimizing strategy in the current information age with embedded reporters and continuous war coverage. Although, the true lessons of Fallujah remain uncertain as the insurgency continues, the lessons learned from the operation continue to impact future capabilities investments and strategic thinking about managing strategy by thinking in terms of effects and not simply actions.

2. Future Implications

As a vital U.S. region of interest facing numerous interconnected issues and threats, the Persian Gulf is a key testing ground for the new global posture concept. Although forces are being withdrawn from Europe and Asia, these theaters still have significant permanent forward presence and bases. This is not the case in the Gulf where supporting the global war on terror and achieving strategic deterrence must be done from a rotational basis. While certain GWOT missions can be easily translated into operational force requirements, the same is not true with achieving strategic deterrence, as sufficiency becomes more abstract. Certain changes stand to play a significant role in defining airpower's ongoing operations. The mating of ISR and strike capabilities onto a single platform such as the Predator B unmanned aerial vehicle (UAV) provides a significant boost in persistent reconnaissance and strike. Carrying up to 14 Hellfire II missiles, the Predator can provide considerable punch given that B-2 or B-52 aircraft can only carry 16 and 12 Joint Direct Attack Munition (JDAM) weapons respectively.¹³³

¹³³ While JDAM and Hellfire munitions differ greatly in weapons effects; from an effects-based standpoint Predator firepower provides an important range of capabilities.

However, these aircraft do have high threat environment and close air support limitations that must be considered.

As terrorists continue to seek haven in urban environments, new capabilities will be required to continue improving current targeting kill chain capacities. Whereas the cycle to identify, target and assess predominantly took days in 1991, recent operations demonstrated the ability to do so in hours and even minutes.¹³⁴ However, adversaries will attempt to take back lost ground by developing adaptive counter strategies. In the urban environment, enhanced munition effects will also become increasingly important. The demand for limited effects short of destroying targets continues to grow for certain missions that must minimize collateral damage. However limited strikes make discerning post attack damage and effects assessment more difficult as effects other than physical target damage become more important.

Greater understanding of the broader strategic picture and role of second and third order effects must be realized by airmen at all levels in order to maximize the benefits of decentralized execution. When each airman's efforts are synchronized in a network centric fashion, the whole can become greater than the sum of the parts. However the opposite can also be true when independent tactical operations pursue conflicting effects at the strategic level. These are not new concepts, but what is new is the ability to synchronize efforts and more quickly recognize opportunities to improve strategic effectiveness and efficiency. Determining the point at which the costs of taking military action exceed the likely benefits will also be important. The U.S. military already outspends its nearest competitor by an order of magnitude, and the desire to push the forward edge of emerging technology poses high research and development costs and the continual need to fund costly upgrades. In the wake of the Iraq and Afghanistan operations, the military services are facing extremely difficult budget decisions as they refocus on transformation roadmaps, reconstitute equipment and training, and reestablish readiness requirements. Difficult budget and priority decisions are coming that must consider not only the current challenges but the future health of the total force as well.

¹³⁴ In the decade since ODS, the Air Force has completely changed the 72 hour air tasking order process as a result of greater integration of sensors, shooter, and decision makers. In OEF and OIF, a large percentage of aircraft launched without targeting assignments and responded to real time targeting needs in flight.

Persistent deployments over the past several years have severely strained the National Guard and Reserve forces. While these have performed brilliantly, it remains questionable whether they can sustain such operations tempo consistently without incurring long-term systemic retention and recruitment problems. A near-term solution to alleviate some of this problem might be to shift the Air Force's rising UAV flight requirements over to National Guard and Reserve forces. The Air Force is rapidly expanding its UAV forces and shifting their flight operations outside the active duty force would increase the potential role the National Guard and Reserve forces could play without having to deploy forward for extended periods. As of April 2005, there were over 750 UAVs operating in the region and demand will not die down anytime soon.¹³⁵

Lastly, current trends suggest the Air Force will be fighting with many of the platforms it has now for the next several decades. The significant cut in F/A-22 production from 361 down to 179 along with termination of the tanker lease deal and uncertainty over the Joint Strike Fighter program raise important questions about future recapitalization requirements. In the mean time, current platforms will continue to need important upgrades to function effectively in the U.S. postmodern networked military.

G. SUMMARY

Airpower has left an indelible but evolving mark on conflict since its inception over a century ago. Over the past 15 years, technology and doctrine changes have been particularly important in maturing airpower and redefining the range of coercive options it affords U.S. decision-makers. Today airpower can *affect* most any target in the world with precision accuracy, reduced cost and little to no direct risk. With stealth capabilities, attacks can be waged in anti-access environments against strategic or tactical targets, virtually unbeknownst to the target party. By robustly networking sensors, shooters, and decision-makers even fleeting targets are left with little sanctuary to operate in and few places to hide. Collectively, these capabilities significantly increase U.S. credibility for holding value targets at risk. However coercive airpower carries with it other indirect costs and risks that affect the overall utility of using force.

¹³⁵ John P. Jumper, "Service 'Jointness'--Key to the Spectrum of Conflict" (London: Remarks to the Royal United Services Institute for Defense and Security Studies, 19 April 2005). www.af.mil/speech/speech/asp?speechID=111 (accessed May 2005).

While many debates still question the limits of what airpower can or cannot do, increasingly it is being called to do many things ranging from long range strike, global mobility, and persistent C4ISR. If recent history is a guide, the U.S. military will increasingly find itself engaged in military operations other than war. The emerging Air Force CONOPS provide a framework for bridging capabilities to actual force structure requirements. Innovative uses of reachback as well as leveraging technology to expand platform roles and missions will significantly enhance the Air Force's ability to manage operations tempo while engaged in lower intensity missions.

V. CONCLUSION

A. INTRODUCTION

The post Operation Iraqi Freedom era will usher in a new era of threats and challenges to American security interests in the Persian Gulf. Although the Gulf region is not the main supplier of U.S. oil imports, global interconnectedness between oil and industrialized economies makes the free flow of oil from its vast reserves a vital U.S. interest. Numerous inter-regional and intra-state threats will continue to endanger regional stability and warrant close attention by U.S. policy makers. The difficult future question is determining how to operationalize airpower in terms of sufficiency and effectiveness to support steady state stability and deterrent goals. While the Air Force currently emphasizes effects based operations as central to its strategic thinking, the concept must be further expanded to provide guidance and shape actions at all levels in order to harness the true potential of networked operations.

In addition to facing resource limits, the United States must also contend with the challenge of maintaining favorable opinion in the Persian Gulf as it tries to define a policy that can preserve the peace and extend prosperity. The costs of failure as seen in transnational terrorists, failed states, and economic dependence are too great to be dismissed easily. Over the past decade, airpower has increasingly been called upon to solve policy problems and has done so with unprecedented success. However, this success has brought with it new challenges as adversaries adapt and evolve. As the higher order effects from the use of force are better understood, it becomes evident that airpower is not a panacea but instead an influence mechanism that must be integrated vertically and horizontally to maximize effectiveness and efficiency.

A systems analysis of the Persian Gulf strategic environment, emergent Bush doctrine, and airpower's capabilities suggest airpower should and will remain a critical part of the Persian Gulf security framework. As dictated by the new global force posture, this role will reflect a distinct shift from past post-conflict force structures. As a globally responsive, precision-targeting force capable of achieving measured effects across a broad spectrum of activities, airpower remains a critical enabler of current U.S. strategy

and offers decision-makers increased coercive flexibility. The resulting implications are not isolated to the Persian Gulf but instead ripple both across the entire global security environment and throughout the Air Force. Developing strategy by thinking in terms of actions, effects, and outcomes while also recognizing the causal linkages between the two is critical to optimizing policy.

B. SUMMARY OF FINDINGS

1. Persian Gulf Strategic Environment

The Persian Gulf is a complicated region with a host of internal and external friction points that make diplomacy and engagement difficult at best. Oil revenues continue to fuel dysfunctional regional economies while religious extremists lash out against globalization trends and the threat of Western cultural influence. U.S. military operations in Iraq have significantly altered the regional balance of power but have also been accompanied by improved bilateral security agreements between the United States and the trucial sheikdoms in the Gulf. As the region faces dangerous reform pressures and deals with the rising tide of terrorism, these relationships become important.

While much of Eastern Europe, Asia, and Latin America underwent significant political and economic transformation towards democratic governance and liberal economic policies following the end of the Cold War, the Persian Gulf has by and large remained somewhat insulated from these changes. While not the only reason, oil has been a major factor enabling the Gulf monarchies to maintain stability despite failing to integrate into the global economy and diversify markets. However, current trends suggest unemployment, scarce resources, and poverty will stress the burgeoning youth populations and may well ignite the limited political and economic efforts being pursued into an uncontrollable domestic inferno.

The past decade has brought significant changes to the regional balance of power. Although its conventional forces continue to age, Iran remains the dominant regional military power with conventional and biological weapons as well. Saudi Arabia has invested heavily in U.S. foreign military sales but has not fully operationalized the equipment and doctrine. Ultimately though, formal U.S. security guarantees and the regional presence of American forces play the dominant role in Gulf security. Recent

operations have enabled the United States to expand its ties and support outside of Saudi Arabia as other Gulf states have stepped up their support with expanded basing rights. The near-term wildcards will be Iraq's path to stability and Iran's nuclear program efforts. The United States expects to play a role in providing its external security, but fallout from its insurgency could affect this as well as domestic stability across the region. Similarly Iran's state sponsorship of terrorism, weapons of mass destruction, and alleged nuclear weapon efforts all have negative effects on regional diplomacy and security.

2. U.S. Policy and Strategic Framework

Since 9/11, American security has taken on a new face as terrorism and weapons of mass destruction concerns have dominated policy and strategy. Recently published strategy documents paint a complex picture of the world and the U.S. role in it. On the one hand, the United States promotes freedom, democracy and basic human dignity as the hallmarks of the new millennium, but on the other hand it emphasizes an enlarging threat environment and the imperative to act decisively and at times preemptively. The ultimate goal being to reestablish and enforce a functioning order in a state of anarchy increasingly defined by transnational sub-state forces, ideological and religious extremism and catastrophic weapons.

The U.S. military is charged with four broad requirements to support national political objectives. These being assurance, dissuasion, deterrence, and if required decisive defeat. Many of these concepts are hallmarks of Cold War strategy but are now being tested under a new paradigm of sub-state actors and collateral damage concerns. Understanding how deterrence and coercion work at the theoretical and practical level is critical to engaging these threats in a meaningful way and identifying improved deterrence mechanisms. By synergizing instruments of power, the United States and the international community is exerting significant military, economic, informational, and political pressure on these groups to accept normative rules of conduct but success will not occur overnight. To support the many challenges over the long-term, the U.S. military will be postured differently as part of a broader global realignment to improve flexibility and responsiveness.

3. Operationalizing the Gulf

U.S. Central Command faces numerous threats in its area of responsibility beyond the Persian Gulf but none that equal the importance of ensuring continued stable oil flow from Gulf oil fields and through the Straits of Hormuz. Assuming Iraq continues to assume responsibility for its security, the U.S. military presence in the Gulf will be drawn down considerably as the force reconstitutes and returns focus to ongoing transformation efforts. Given the lack of permanent U.S. forces or main operating bases, the key enablers become pre-positioned supplies and infrastructure, expeditionary forces, and continued operational access. Airpower's global mobility, global strike, and persistent C4ISR are capabilities in this expeditionary construct. However balancing steady state missions focused on building up allied capabilities while also achieving sufficient deterrent value is difficult. There is no one right answer, but instead a challenge to optimize potential costs and benefits.

C. POLICY IMPLICATIONS

1. Strategic Environment

The rise of sub-state forces capable of inflicting catastrophic damage across transnational borders is the impetus behind the so called global war on terror, and the Persian Gulf is at the heart of this conflict. The United States favors political and economic reform in the region as a necessary step to long term sustainability and stability. However, democratization, whatever form it may take on, is an uncertain process, and Arab democratic reform may not necessarily lead to favorable political conditions for the USG. Religion and ideology are powerful unifying concepts in the Persian Gulf. The United States must be careful of how its actions are perceived and portrayed because they can be used to incite Islamic nationalism and exacerbate rising anti-Western sentiment.

A nuclear Iran poses several potential problems ranging from an unstable regional balance of power to the demise of the nonproliferation regimes as nuclear breakout occurs. The United States remains reluctant to offer positive incentives to Iran as a means for finding an agreeable middle ground. The problem however is that Iran has increasingly framed the issue as a challenge to its national sovereignty, which leaves its

leaders little room to back down. Furthermore, Iran has limited its vulnerability to air attack by spreading out its critical nuclear assets and relying on more underground facilities. Collectively, the signals suggest that while Iran definitely fears a possible American attack, it does not appear inclined to give up its nuclear program based simply on the threat of it. To effect change, the United States must better integrate its non-violent instruments of power. Furthermore, it must promote a regional security framework that addresses Iran's security needs as part of the regional security picture.

Current projections for increasing social and economic pressure on the already impoverished, unemployed, and frustrated youth population in the Gulf region will continue to threaten stability and impose difficult political challenges. At \$50 per barrel, oil prices can temper the pressure for a while but do not address the broader root causes of the regions economic troubles. If the United States is going to remain engaged, it must support regional economic expansion policies that are politically and socially acceptable but also offer long-term solutions. As the global war on terror progresses, the better strategies to win the war of ideas and beliefs must emerge. Strategists must develop an effective counter-narrative to discredit the violent extremists currently sustain their support base by feeding off of discontent in the region. This will require balancing values and interests as using U.S. military resources in more enabling roles than just coercive.

2. U.S. Policy and Strategic Framework

The defense department's model for using military forces to support national goals is changing to meet the new challenges of the 21st century security environment. Airpower provides important kinetic and non-kinetic capabilities to support joint military objectives and will continue to play an important role in the Persian Gulf security framework. To translate current capabilities into tomorrow's roles and missions, decision-makers must begin a process of better specifying the goals and desired outcomes espoused in current strategy documents. Overall, the new global posture will rely on less permanent troops abroad, but the Gulf stability is secured by rotational forces and non-permanent basing rights. Interstate aggression appears less threatening than it did a decade ago, but transnational sub-state actors have emerged that threaten intra-state stability. The fundamental strategic concepts of assurance, dissuasion and deterrence

must be focused on the new threats to stability if policy makers hope to avoid deteriorating conditions that will require the use of force to resolve.

On the other hand, the perceived ability for the United States to control escalation, limit collateral damage, and destroy specific targets makes the option for force seem somewhat more palatable. However, if one acknowledges that adversaries will not accept U.S. supremacy but instead gamble on their ability to counter U.S. conventional advantages with asymmetric challenges, a much more violent future could be in store. One of the great stabilizers of the Cold War was the stark realization that violence could not be controlled in a nuclear exchange but instead would destroy the world. Thus, while America has a freer hand to use limited force or coercive diplomacy, it must carefully weigh the higher order effects that also accompany the use of force. As Robert Pape concludes, "coercion is no easier, only sometimes cheaper, and never much cheaper, than imposing demands by military victory."¹³⁶

3. Operationalizing the Gulf

The diffusion of precision technology across platforms has enabled airpower to play a more decisive military role in military operations. As Iraqi operations demonstrated, maintaining command of the air is no longer the difficult challenge. Instead the challenge is identifying meaningful ways to influence terrorists and developing the capabilities to do so at will. Global strike capabilities provide important strategic value to U.S. policies and airpower's global mobility and robust C4ISR capabilities are invaluable enablers in the new defense strategy. While the loss of air base access in Saudi Arabia has been replaced by support from other countries, the Air Force cannot assume this will always be the case. The challenge of preserving political access to conduct operations and secure the physical protection of these bases in light of the proliferating challenge of asymmetric attacks will remain problematic.

Having sufficient offensive and defensive capabilities in theater to convince would be adversaries not to take threatening actions because they cannot hope to succeed is important but difficult as the threats continuously evolves. Effectively monitoring developments and anticipating new challenges requires improved intelligence, insight,

¹³⁶ Pape. *Bombing to Win*, 331.

and understanding that is often blocked by cultural differences. Furthermore the military must remain wary of learning the wrong lessons about expeditionary response capabilities. It is highly unlikely that Iran would allow the United States to build up forces in a crisis. Thus in crisis situations, enemies may feel they must escalate to increased violence early should the U.S. military begin to deploy forward to support a developing crisis. Essentially, expeditionary response could become a trigger for adversary actions that will complicate U.S. strategic assumptions regarding how the military will respond to crises.

D. CLOSING

Overall, much operational and analytical work remains to be done as U.S. strategy evolves in the Persian Gulf. This research has framed the future U.S. security framework in the Persian Gulf and airpower's role in it around a systems analysis that captures the important systemic changes affecting future policy. Ultimately, airpower's actual role will be driven both by steady-state and surge requirements both for coercive or kinetic effects but also more importantly for steady state informational and enabling capabilities that cannot be achieved from an over the horizon posture. If the future is one where "the world will not 'come together,' but has already begun to divide anew between open and rule-of-law states and lawless territories with flags, and between brilliant postmodern economies and cultures utterly unequipped for global competition" then this will be no easy task.¹³⁷ Understanding how airpower can contribute to positive effects in the overall U.S. strategy will be important to crafting effective and efficient policies that can preserve the continued flow of oil from Gulf fields and promote long term peace and stability.

¹³⁷ Ralph Peters, *Beyond Terror*, 325.

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APPENDIX 1 AIR FORCE CONOPS¹³⁸

Homeland Security	Leverages Air Force capabilities with joint and interagency efforts to prevent, protect, and respond to threats to our homeland.
C4ISR	Encompasses the integration of manned, unmanned, and space systems to provide persistent situational awareness, space control, and decision-quality information.
Global Mobility	Provides the planning, command and control, and operations capabilities to enable timely and effective projection, employment, and sustainment of U.S. power in support of global interests.
Global Strike	Employs joint power projection capabilities to engage anti-access and high-value targets, gain access to denied battlespace, and maintain that operational access for required joint/coalition follow-on operations.
Global Persistent Attack	Provides a spectrum of capabilities from major combat to peacekeeping and sustainment operations. Global Persistent Attack assumes that once access conditions are established via the Global Strike CONOPS, there will be a need for persistent and sustained air, space, and information operations.
Nuclear Response	Provides the deterrent "umbrella" under which conventional forces operate and, should deterrence fail, provides options for scalable response.
Agile Combat Support	Details the capability to create, protect, and sustain Air and Space Forces across the full spectrum of military operations. It is the foundational, crosscutting, and distinctive capability that enables Air Force operational concepts.

¹³⁸ As presented in the 2005 Air Force Posture Statement, 22-23.

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APPENDIX 2 GLOSSARY OF ACRONYMS AND ABBREVIATIONS

AEF	Aerospace Expeditionary Force
AEW	Aerospace Expeditionary Wing
AOR	Area of Responsibility
C4ISR	Command, Control, Computers, Communication, Intelligence, Surveillance, and Reconnaissance
CAS	Close Air Support
CD	Coercive Diplomacy
CONOPS	Concept of Operations
CSL	Cooperative Security Location
DOD	Department of Defense
EBO	Effects Based Operations
F2T2EA	Find, Fix, Track, Target, Engage, Assess
FMS	Foreign Military Sales
FOL	Forward Operating Location
GCC	Gulf Cooperation Council
GPR	Global Posture Review
GPS	Global Positioning System
GWOT	Global War on Terror
HDBT	Hard and Deeply Buried Target
JDAM	Joint Direct Attack Munition
JIC	Joint Integrating Concept
MOB	Main Operating Base
NDS	National Defense Strategy
NMS	National Military Strategy
NSS	National Security Strategy
OA	Operational Access
ODS	Operation DESERT STORM
OEF	Operation ENDURING FREEDOM
OIF	Operation IRAQI FREEDOM
TCT	Time Critical Targeting
UAE	United Arab Emirates
UAV	Unmanned Aerial Vehicle
USCENTCOM	United States Central Command
USG	United States Government
WMD	Weapons of Mass Destruction

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